

THE UNIVERSITY OF CALGARY

**A PROPOSAL FOR
THE EAU CLAIRE MARKET
CALGARY, ALBERTA**

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A MASTER'S DEGREE PROJECT SUBMITTED TO
THE FACULTY OF ENVIRONMENTAL DESIGN
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MASTER'S OF ENVIRONMENTAL DESIGN
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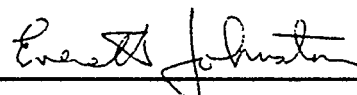
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The undersigned certify that they read, and recommend to the Faculty of Environmental Design for acceptance, a Master's Degree Project entitled **A Proposal For The Eau Claire Market Calgary, Alberta** submitted by **Patricia A. Wall** in partial fulfillment of the requirements for the degree of Master's of Environmental Design.



Supervisor Dale M. Taylor



Dr. Everett Johnston



William T. Perks

Date: November 26, 1987

DEDICATION:

To Mila,

Who became a part of my life
during the course of the project.

ABSTRACT

A PROPOSAL FOR THE EAU CLAIRE MARKET CALGARY, ALBERTA

PATRICIA A. WALL

Prepared in Partial Fulfillment of the Requirements
of the M.E. Des. (Architecture) Degree in the
Faculty of Environmental Design
The University of Calgary

Supervisor: Professor Dale Taylor

A market for Calgary should have some recollection of the market tradition. The traditional market has always been one of three forms: the basilica, the colonnade, or the street. The project illustrates a design proposal echoing these three basic linear forms. The proposal integrates market buildings, streets and gardens to create an alternative to the uniform spaces of the internalized shopping mall. Along with the historical form, the site in Eau Claire is an important determinant to the design and the organization of spaces.

The proposed design focuses as much on the public role of a building as on the technical, structural and aesthetic issues. By tying the market activities to the main path and to recreational and cultural events, the experience of shopping broadens into a public, social event.

**A PROPOSAL FOR
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PREFACE

When I started this project, I knew very little about the market tradition. The markets I was most familiar with were those I intentionally visited or stumbled upon in Europe. What struck me most about these markets was the feeling of stepping back into another world. A world which offered a unique and special atmosphere, an atmosphere of noisy chaos – shouting and haggling and of curious smells – the blend of fresh onions, fresh fish, bread and exotic spices. With a particular interest in architecture, I also noticed the historical buildings that enclosed these outdoor markets. These historical buildings are analogous to a theatrical backdrop which seem to reinforce the permanence of a long standing tradition.

When the idea of a market for Calgary came to light, I wondered how this personal high-spirited form of commerce could become a part of our urban environment. This became the major challenge of the Master's Degree Project.

The M.D.P. is intended to stimulate thought about the market tradition and its inherent characteristics, the architectural response to that activity in a contemporary setting, and the potential to enrich and enliven a street and urban setting in Calgary.

ACKNOWLEDGEMENTS

Through the course of this project there are a number of people who helped me remain on track. First, I would like to thank Dale Taylor, my chairman. Without his endless guidance, support and patience much of the inspiration for this proposal would not have been fully realized. I would also like to thank Dr. Everett Johnston for his enthusiasm and advice. Special thanks to my husband, Roman Czemerys, for his understanding, assistance and encouragement and my fellow students, Marco Buccini, Dave Down, Nathalie Newman, Bill Mak and Pauline Morin for their suggestions. Special thanks to Kathy Crawford for her help in preparing the final product.

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SECTION I INTRODUCTION

"The markets offer an urban educational experience in the broadest sense of enabling people to see facets of humanity, activities, and aspects of the city not easily accessible elsewhere."

Victor Steinbrueck, 1968.



INTRODUCTION

"The Olmstead parks created idealized, quite artificial rural settings for the residents of the sprawling Victorian cities who yearned for their lost contact with nature. In the reverse way, the markets provide an idealized city for us today who have lost touch with urbanity." ¹

Urbanity – living and participating in urban life – is becoming more and more evident in Calgary. The recently completed Olympic Plaza and the Performing Arts Center have added a cultural draw to Calgary's urban center. The flourishing shopping areas of Kensington Road and Seventeenth Avenue have also contributed to an increasingly active street life. With these streets and open spaces in place, there are more reasons for people to stay downtown other than work. "Think of a city, and what comes to mind? Its streets. If a city's streets look interesting, the city looks interesting: if they look dull, the city looks dull." ² A market for Calgary has the potential to draw people in the evenings and weekends, thus renewing the pulse of an urban setting along the river.

The challenge of this Master's Degree Project is to come to terms with the question of how the market typology fits into our urban environment and into a city that has a relatively short history in the market tradition. To meet this challenge, a number of key questions need to be addressed, such as: What is a market? How should a contemporary

market solution be embodied? Is it different from the shopping mall? These questions have led to an inquiry of historical and contemporary markets.

The other aspect of the project that has had an influence on the proposal is the unique location of the site. In the riverfront location, there is potential for contact with both nature and urbanity.

Through an investigation of the market typology, it became evident that, historically, the public realm (streets and squares) was as much a part of the market as the architecture. In many cases, the market was the street, thus the investigation broadened to include the nature of the street as well as the nature of the market. The market and the street together form an overall framework for the proposal.

The traditional street was the most public place in the city and one of its first 'institutions'. "The street is a room; a community room by agreement; a room with buildings as walls, the sky as its ceiling... it is a place where people meet, children play, vendors display their wares." ³ It is within this space that public life unfolded. In this place, strangers, acquaintances and friends comfortably rubbed shoulders.

The market was also a public place – a place of social interaction as well as commerce. It was an integral part of the public activity of the street. The notion of the traditional street is the

main underlying premise for the proposal – the street as a public room in the city and a forum for the market activity.

THE PROJECT

The Master's Degree Project presents a design proposal for a market in Calgary's Eau Claire district. The proposed buildings and open spaces are intended to respond not only to structural, functional and aesthetic needs but also to address the public role of the building on a unique urban site.

PROJECT FOCUS AND SCOPE

The investigation of typology and site will result in a design for a building in which market and other public activities take place. The design is influenced by historical precedents of buildings, streets and squares, as well as the unique location of the site. Ideas and aesthetics play an important role in the design along with programmatic needs.

Since the project is a theoretical proposal many of the stages necessary to completing a built structure are beyond the scope of this M.D.P. For example, the study will not include building costs, construction details, marketing and financial analyses or a management strategy.

PROJECT OBJECTIVES

The overall objectives for the project are as follows:

- To identify the elements of the market that have been prevalent throughout history.
- To design a market building that is based on the market tradition and its spatial form.
- To apply theories about public space that promote an active street life.

A number of resources have contributed to the realization of these objectives:

- A study of the market typology from a cultural, economic and spatial perspective.
- A study of current market precedents.
- A study of urban criteria which promote a livable environment and accommodate the varied activities traditionally associated with streets and open spaces.
- An analysis of the context and site.
- A study of an existing program for the proposed market in Eau Claire (see Appendix B).

These studies and investigations are documented in Sections II through V. Each section is set up as a general discussion followed by design objectives. In Section VI the design proposal is presented. The design reflects an interpretation of the ideas and conclusions formed from the preceding analyses.

SECTION II THE MARKET TYPOLOGY

"Traditional markets are crudely simple. Evolved from street stands they are rarely enclosed at their perimeters nor are their functions segregated: goods are unloaded in the same area in which they are prepared and sold and roofs protect the produce more than the purchaser. They also smell ..."

Peter Cardew, 1987.



INTRODUCTION: THE NATURE OF MARKETS

The market tradition had its place in almost every culture and time throughout history. It has always been an essential element in the livelihood of the preindustrial community. In Europe, the origins and growth of many cities were dependent upon the existence of a market as a "place of a regular rather than an occasional exchange of goods." ⁴ It was a public event where farmers, merchants and city dwellers were drawn together. Though most importantly an economic institution, the market also provided a setting for communal public life – a social and cultural center. The market was so open and accessible that no one was excluded – the young and old, the rich and poor, people from all social groups and occupations.⁵

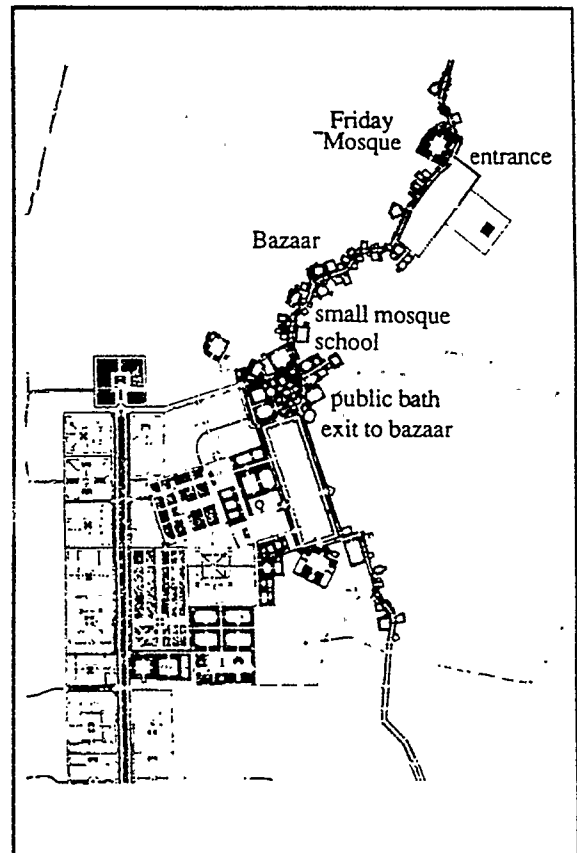
The section is divided into two parts – a general discussion of the nature and form of the market, followed by a set of implications and objectives for the design proposal. It is recognized, however, that the literal application of historical precedents would not be appropriate. A design should evolve out of the political, cultural, and social systems in keeping with our own *zeitgeist* (spirit of the time).

ISLAMIC MARKETS

The market, called a *bazaar*, was a part of the main passage through the Islamic city. Along the *bazaar* street all other public institutions were found, such as schools, public baths and the Mosque. Gates indicated the ends of the street. This special street was a connector of all aspects of public life in the Islamic city.

Since the *bazaar* was a street, it was linear in form. The Eastern *bazaar* was covered, unlike the Western markets. The *bazaar* form was a response to the intense heat and strong winds of the desert climate.

1. The Street Bazaar, Isfahan, Iran.



A series of skylit domes marked the path of the *bazaar*. At special points, such as the crossing of two main streets, the dome was raised and adorned with elaborate motifs.

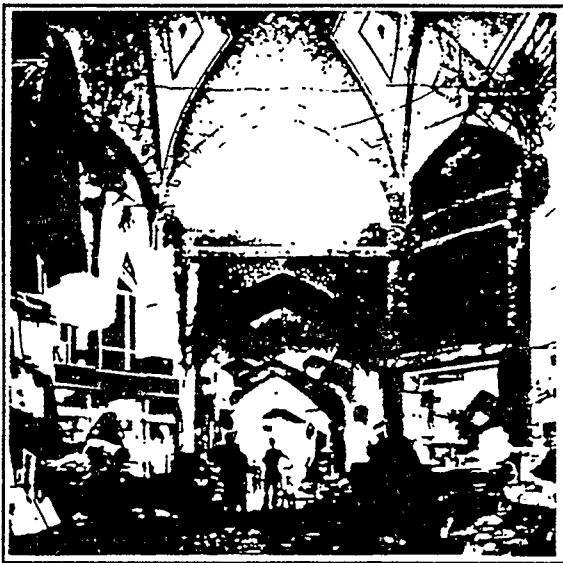
The repetition of domes and bays was typical of the *bazaar*. This form led to a linear organization of goods. All Goods of like type were grouped together, such as the *spice bazaar* or the *metal bazaar*, and the most precious goods were placed under the light in the center. The domed spaces were dark, cool and almost mystical in quality, which was much different from the open qualities of its Western contemporary – the market square.

THE GREEK MARKET

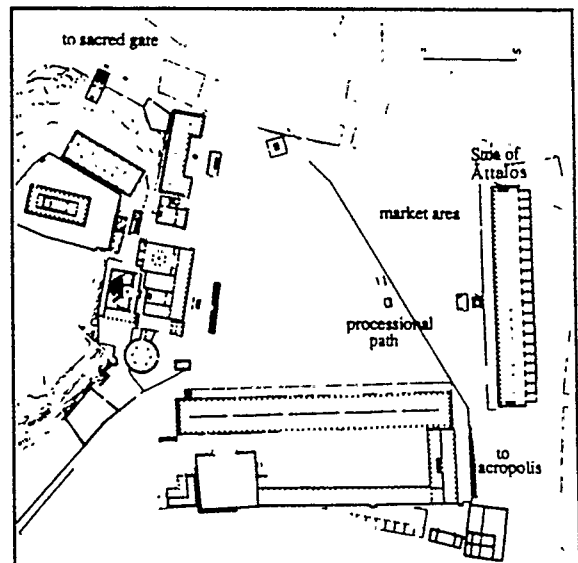
Like the *bazaar*, the market in Greece began on the main street in the city. This space became known as the *agora* (meaning gathering place) which was centered between the 'sacred' gate and the *acropolis* (the religious center of the city).

In Athens, the *agora* began as a simple unadorned marketplace but by the fifth century B.C. it became more than a gathering of buyers and sellers – it was the heart of all public life. Artists, philosophers, politicians and farmers gathered together in the *agora*. It was a place of public speeches, citizens assemblies, theatre, religious festivals as well as market functions. "In the *agora* you will find everything sold together in the same place in Athens: figs, witnesses to summonses, bunches of grapes, turnips, pears, apples, givers of evidence, roses, medlars,

2. The Bazaar.



3. The Agora, Athens.

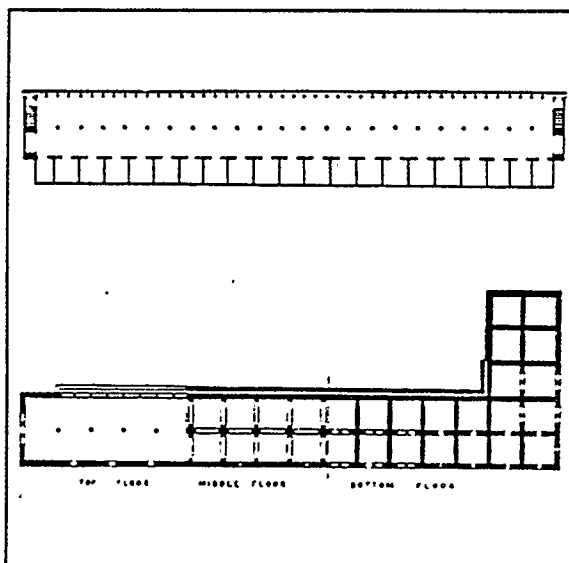


porrage, honeycomb, lawsuits..."⁶

The market, at first, was a street market where farmers would set up temporary booths and carts. Over time, the original street widened into a square, the *agora*, and the *stoa* was built to enclose the square and shelter artists and shopkeepers under a permanent roof. The *stoa* was a general purpose public building, open in the front and lined with equal sized shops at the back. It was constructed as simple post and beam construction and covered with a flat or shed roof.

A more complex covered market, the market-building, grew out of the *stoa* form. It was a similar linear form but rose in height to three stories in response to a terraced site. The upper floor of the market-building faced onto the *agora*.

4. The Stoa of Attalos, Athens and Market-building, Aegea.

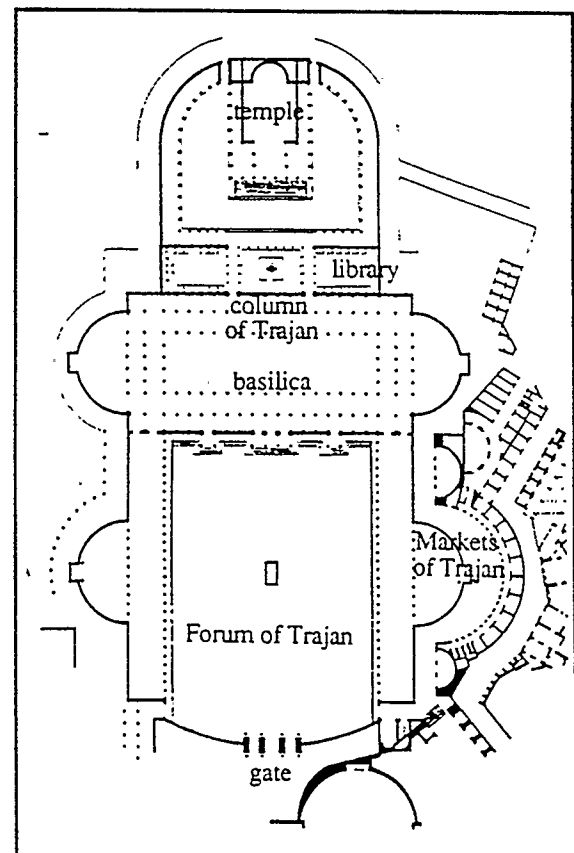


THE ROMAN MARKET

The Roman *forum*, like the *agora*, was the gathering place where market activities were found. The *forum* differed, however, from the *agora* in that it was a closed unit rather than a space defined by a continuous street. Typically, the *forum* had a strong sense of axial organization, symmetry and total enclosure.

The *forum* grew from a small trading center into a series of open courtyards and buildings set up as a hierarchy of secular to sacred spaces. Like the *agora*, public build-

5. The Forum of Trajan, Rome.

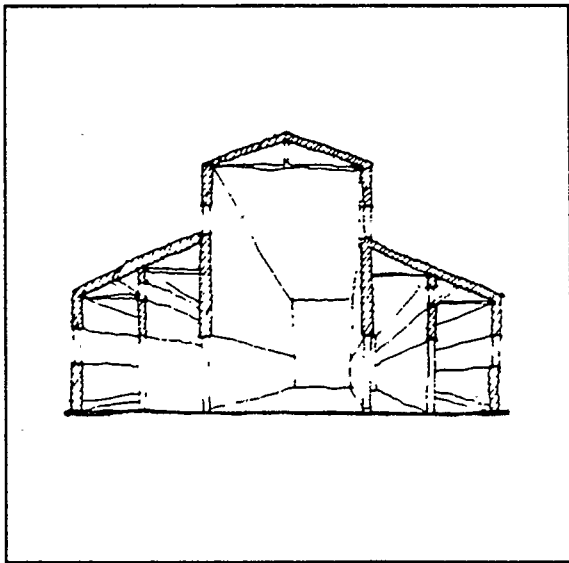


ings of consequence were located there – such as the temple, the library, the basilica and the market. The colonnade, much like the *stoa*, was the device used to enclose the forum and link the different public functions.

Under the colonnade and in the basilica (meaning hall) market functions took place. These structures were not solely for that purpose though. The basilica was a vaulted structure that set up two orders of space – a tall central nave with lower side aisles on either side. The hierarchy of forms set up a way of providing natural light to the inner most parts of the building. The basilica and colonnade, as linear forms, easily accommodated the fixed and flexible spaces of the market.

The markets of Trajan were built specifically for the market function.

6. The Basilica.



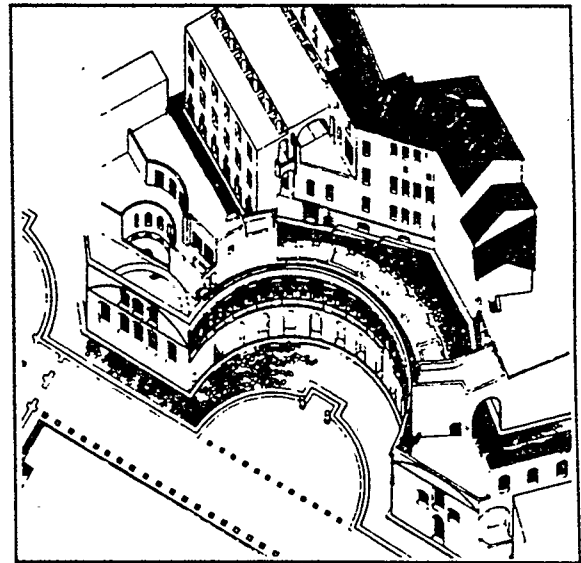
The semi-circular form contained over one hundred and fifty booths on the first level alone – it was built up to six levels over steep terrain.

There were many architectural features of this structure used for the first time such as vaults, stairs and terraces. The central vaulted streets introduced natural light into every space. Stairs and ramps enticed market dwellers up a steep slope. Terraces and balconies offered fine views across the *forum*.

THE MEDIEVAL MARKETS

The feudal government of the Middle Ages offered little opportunity or need for trade among its people. Feudalism reflected a strict stratification of society. It was not until the fourteenth century that the market offered a place where merchants and craftsmen could make

7. Trajan's Markets, Rome.



a living selling from market stalls. During that time artisans and merchants became a distinct social group organized into guilds and trade unions that regulated prices and set a code for business practices. Shopkeepers' and artisans' livelihoods depended on being near the marketplace.

The market was first located beside the church or along the main path of the city. The market first began beside the church which was a major traffic generator. The open space eventually split from the church, distinguishing the flesh from the spirit. These two spaces were known as the church *parvis* and the central market square. As the community grew, more specialized market squares developed, such as the vegetable market, fish market, and cattle market.

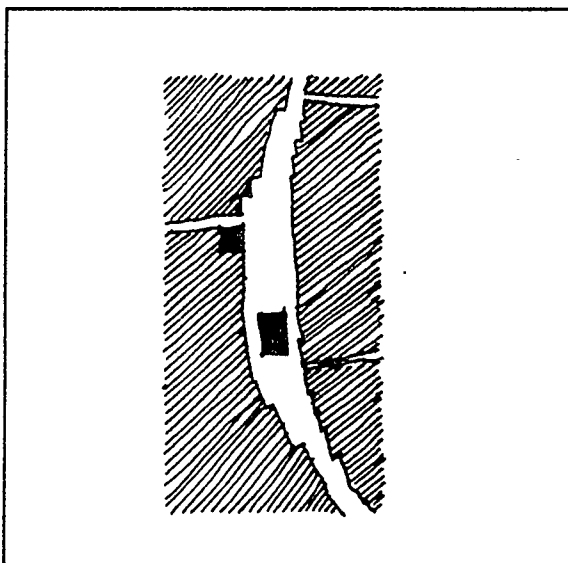
Other markets began on a street that

was wide enough to accommodate a main passageway as well as carts and booths. As traffic increased, the market proper increased into a widened street. It was an open space beside the street that was protected yet still connected to the main thoroughfare. Within the widened area vendors could find more room to set up while still being near the street.

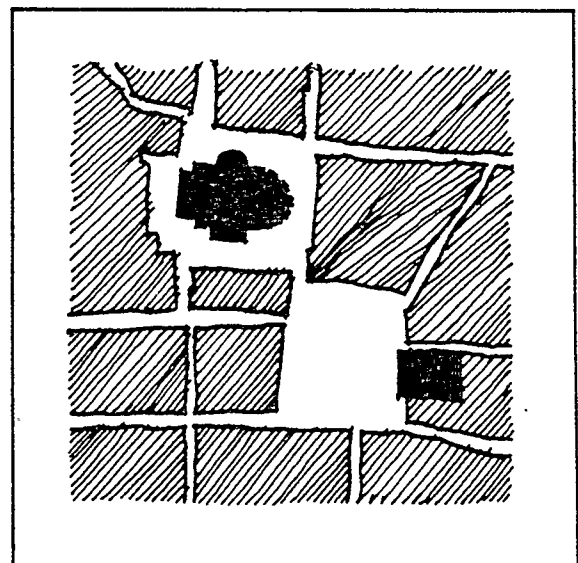
Like the *bazaar*, the *agora* and the *forum*, the medieval market street was the most important public place for social life as well as commerce. In the square or broadened street the town's public buildings were constructed, such as the town hall or the guild hall.

In the medieval city, the market remained an outdoor function. Only under the colonnade of the public buildings were vendors and their goods protected.

8. The Broadened Street.



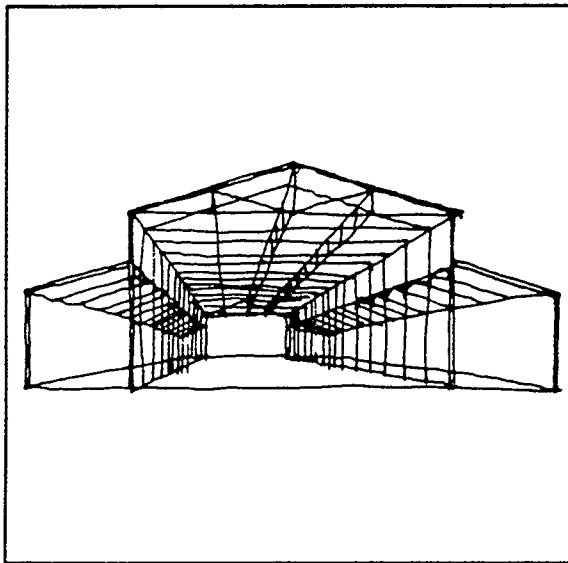
9. The Church and Market Squares.



THE NINETEENTH CENTURY MARKET HALL

The new construction techniques and materials of the nineteenth century were first displayed in the market hall. The unpretentious structures were manifestations of the Industrial Age which offered wider spans and a more efficient use of structure. While the construction techniques changed, the form remained the same – the basilica. Structures were light, airy and unembellished, symbolic of a new and modern age.

10. Market Hall of Madeleine, Paris.

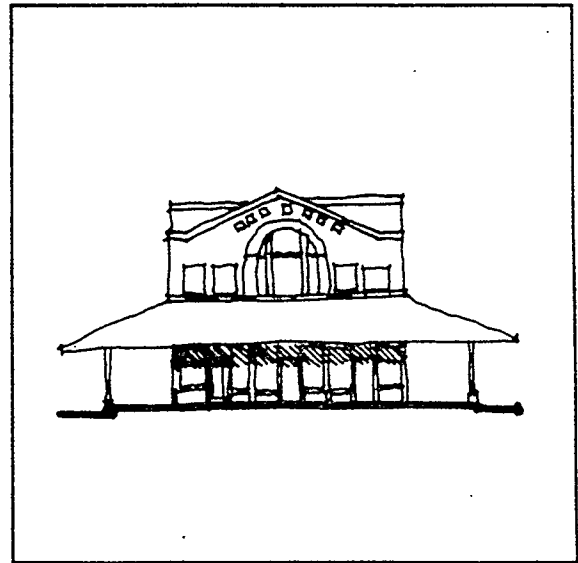


THE CANADIAN MARKET

Markets in Canada, unlike European markets, developed after settlement as already in place. The first settlers were dependent on trading posts for their goods and not the markets. As settlements grew and more surplus was available, market activities grew. By the mid-nineteenth century when commercial and industrial activities of the towns prospered, so did the markets.

During that time, every town had a market square. Trucks, animals, buyers and sellers all congregated within its boundaries. The church and town hall often stood in these early squares. Later the market moved inside the town hall. The market shared space with other public functions such as: the town council, post office, jail and library. Since the market activity was periodic, the space reserved for the

11. By Ward Market, Ottawa.

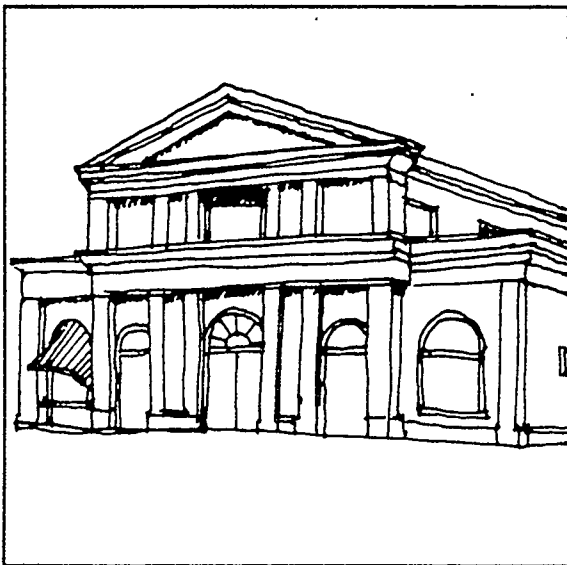


market doubled as a political arena, wrestling ring, dance hall and, sometimes a courtroom.⁷

The market structures that were built solely for the market function also followed the typical basilica form. The side aisles were either open to house outdoor market activities such as in the By Ward Market, or closed to internalize the functions, such as in Calgary's original market building.

The Canadian market buildings were humble, approachable, yet handsome and unassuming next to other public buildings such as the city hall and courthouse. Like the other market buildings the space was highly flexible in plan, linear in form and drenched with natural light.

12. Calgary Public Market, 1912.



IMPLICATIONS

From the preceding review, a number of key elements have become evident. There are three basic forms markets have taken throughout history – a street, a colonnade, or a basilica (see Appendix A).

The first form – the street – was the simplest and least expensive way to set up a market. Because of its location in the public realm, the street market functioned as a link between two points and as a spine to which secular and symbolic public functions were attached. "Streets made and revealed the city."⁸ In this case, the street markets revealed the prosperity or decline of the city's economy.

The historic location of the market was dictated by natural distribution points – the harbour, the railway station, the town gate, or the centre of the city. The location of the market street was of particular importance for ease of access and points where business was brisk. The street market of the ancient city was typically a tight linear space just wide enough for goods, buyers and sellers.

The second form – the colonnade – which encircled and enclosed the public realm and contributed to the fusion of inside and outside space. This element was either a separate entity (the *stoa*) or attached to a public building (the colonnade). The latter acted as an entry foyer between inner space and the external

environment. Under the colonnade, one could be both public and private. The scale was intimate and offered a place where the temporary vendor felt sheltered and secure.

The third form markets have assumed in history – the basilica – was a shed form that reemerged throughout history. The hierarchy of spaces (the nave and aisles) and its linear form easily accommodated the temporary and permanent booths of the market. The form contributed to an open airy appearance, as if it were open to the sky – like the street market.

Simplicity, flexibility and improvisation are all key words to describe the historic market. The humble, understated appearance of these markets implies structural and aesthetic directions in form and materials. It has been said about the markets "...the town's noblest quarter is considered just good enough for the humble booths."⁹

OBJECTIVES

Developed from the preceding implications, the objectives for the market design are:

- to link the market function to a main path and other public functions.
- to provide a highly flexible, simple, linear space for market activities.
- to express an approachable, humble appearance.
- to provide an abundance of natural internal light.

SECTION III THE CONTEMPORARY MARKET

"When we were strangers in the land we made our own welcome and warmed ourselves with our laughter and created our own belonging. To us the marketplace was the least strange of all; there had always been markets."

Adele Wiseman, 1964.



INTRODUCTION

Public and farmers' markets are being rediscovered in both urban and rural areas. By the 1960's, the markets were considered inefficient, unsanitary, and unproductive sources of revenue in both Canada and the United States, but this has changed. A renewed interest in fresh food, small personalized shops and the qualities of historic structures have combined to produce the contemporary public market. Smells, noises, colors and personal contact between the buyer and seller have been attracting people back to the market. In the past decade, there has been evidence of growth and prosperity among numerous farmers' markets in many Alberta towns. Government support through subsidies has contributed to their success.¹⁰ Since shopping has become a recreational pastime, people seem to be searching for alternatives to the uniform spaces of shopping malls and supermarkets.

The contemporary market is a variation of the urban shopping mall, but without the flamboyance and interjection of Disneyesque façades and amusements often found in malls such as the West Edmonton Mall.

The two types of contemporary urban markets found in North America are the public market and the festival market – the former being a 'working' market, the latter being a 'recreational' market. Most of these markets are housed in

restored historic buildings. This seems to suit the market's improvisational character and a tradition with a strong connection with the past. Though this is the norm, there are a number of successful markets in new buildings.

THE PUBLIC MARKET

The urban public markets in North America are based on the same principles that have governed the market tradition for centuries – goods are sold by the farmer, artisan, or small shop owner directly to the customer. The public market can be described as a 'working market' – a necessary part of daily life that people are dependent upon for daily fresh foods and staple goods.

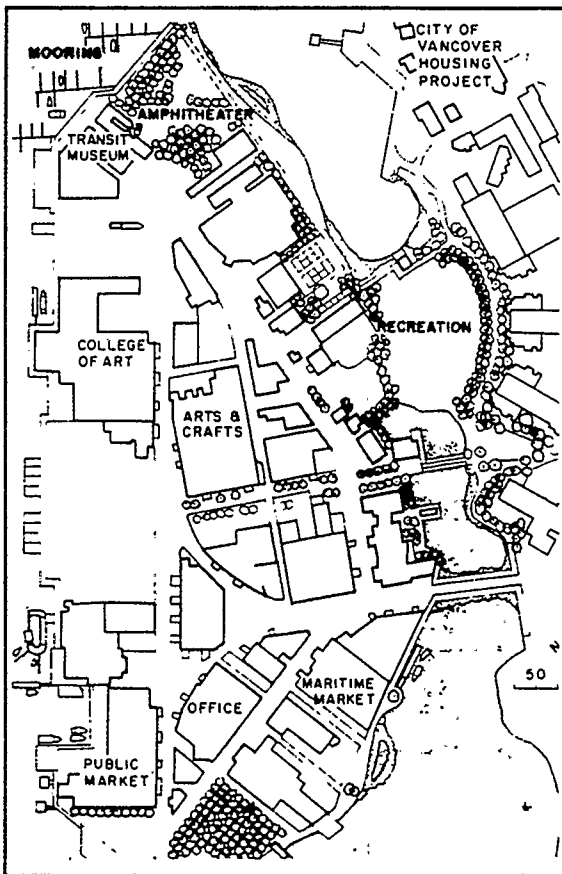
Though the means of transporting goods has changed in this century, the actors and props of the market have remained the same – small local producers selling local and regional goods. The market operates from temporary and permanent booths rented on long term and short term leases or daily licenses. The emphasis of the market is on becoming acquainted with the producer rather than a representative of a chain store.

In keeping with the historical models, the working market is geared to low prices and low overheads, thus the space is simple, informal and unpretentious. The building structure is commonly exposed or

clad with basic materials. Simple flexible stalls and ample daylight are devices used to minimize costs. Like the delivery and display of goods, the building is straightforward, up front and open. It gives the impression of being public and accessible.

The public market in an urban area needs to be part of a viable context rather than a self sustaining entity. It draws upon other commercial establishments such as restaurants, cafes, shops, hotels and offices as an integral part of the activity. Long-term success is dependent on direct links with residential and commercial enterprises.

13. Granville Island, Vancouver.



EXAMPLES

Granville Island Public Market in Vancouver is conceived as a marketplace, not just a public market. It incorporates social and cultural uses along side the market. Located on an island, the area is separated from the urban center. It recreates a separate urbanity of human scale buildings and pedestrian streets, however, with its growing popularity, parking and traffic congestion has become an increasing problem.

The waterfront setting and the unique shopping and cultural experiences draws local residents from False Creek, tourists and Vancouverites from all parts of the city. Its success is dependent on a constant mixture of activities – from art groups and theatres, small manufacturers and shops, to restaurants, hotels and cafes. The public market actually being at the heart of the activity.

Pike Place Market in Seattle was founded eighty years ago as a street market and has remained that way. It is one of the most authentic and extensive markets that still exist in an urban area. Local farmers and their goods have strong historical roots in the market. Many of the same vendors have been participants in the market for forty years.¹¹ The market extends over an area of three blocks on a cliff overlooking Elliot Bay in Seattle's urban center. The buildings focus onto Pike Street, which is the center and heart of the market. The arcade along the street

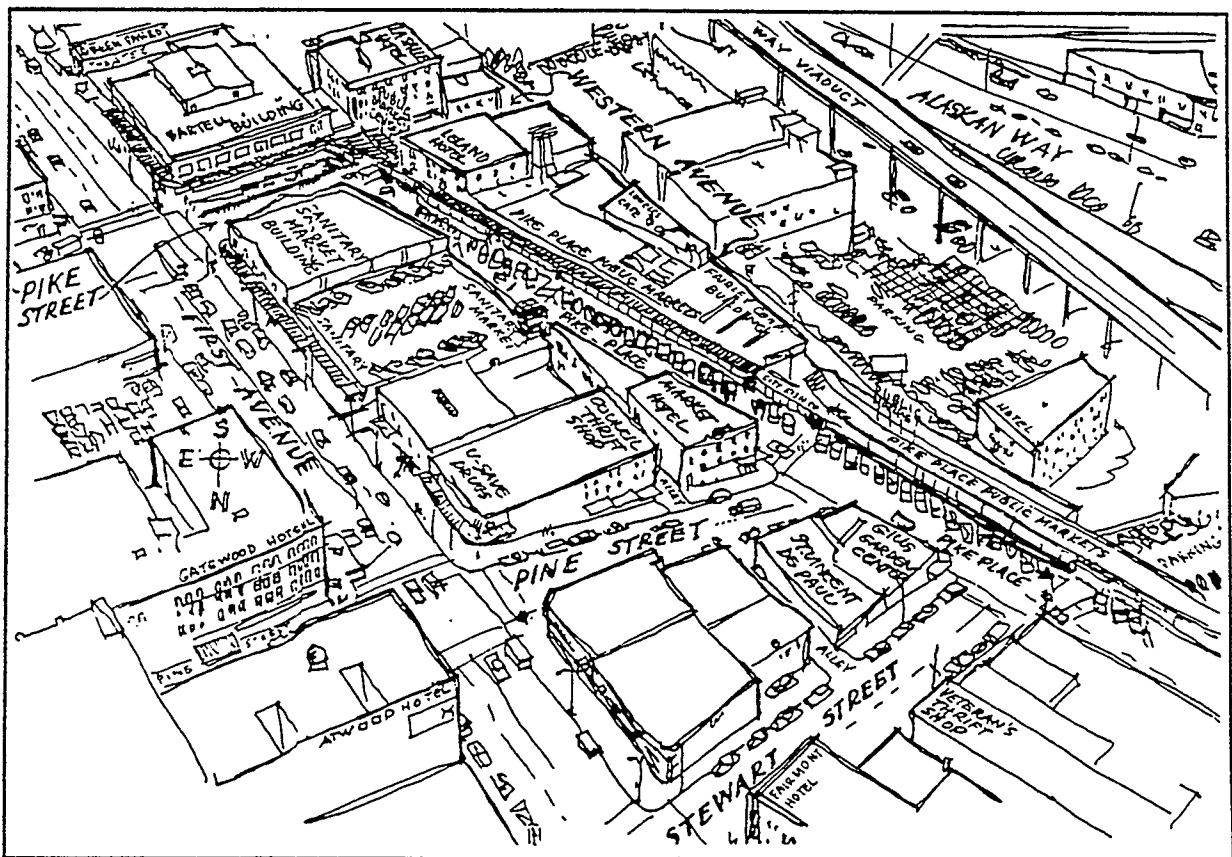
still houses the farmers booths, as it has since the early 1900's.

It is the combination of interesting locals and produce, rather than the architecture, that draws people to Pike Place Market. Various uses and entertainment also make for a bustling place. Hotels, boarding houses, apartments, restaurants, and shops of all kinds have been an important part of the market's history. People have come to expect an active street life, the distant views to the sea and mountains, and the variety of exotic and local goods. The mixture of uses keep the area active beyond daily working hours.

THE FESTIVAL MARKET

A variation of the public market – the festival market – is a unique form of shopping which has been introduced in the past ten years. The festival market is essentially a 'recreational' market where gathering, eating and entertainment are as important as the act of buying goods. What the festival market offers is a destination in the city: a place to go, to be entertained. The festival market mixes the working market functions with specialty shops – selling souvenirs and luxury items – a variety of restaurants and programmed and spontaneous enter-

14. Pike Place Market, Seattle.



tainment to attract both tourists and locals. Like the public market, the festival market seeks local vendors and products as an alternative to franchise operators.

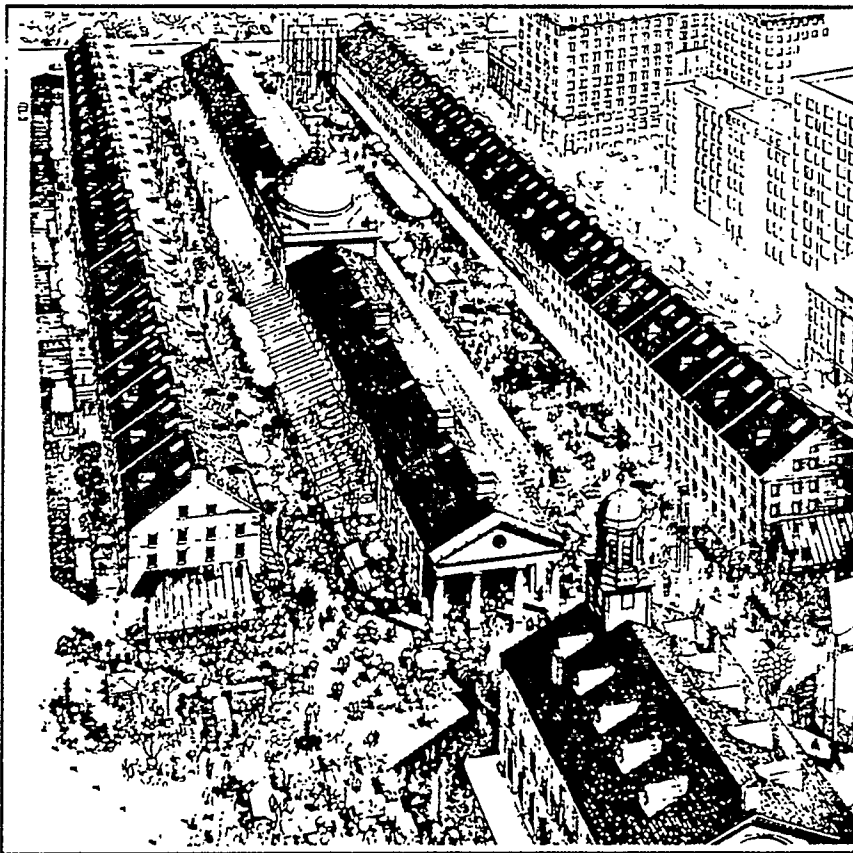
Most festival markets are an integral part of the urban fabric, offering pedestrians an opportunity to walk, to browse, to watch and be watched. The festival market has been described as "an impersonation of a kind of urban life that no longer exists in most of America. It's a theatrical representation of street life. It has to be this, because that is the stage we have to go through as we begin cautiously, self-consciously

to re-enact the urban culture we abandoned. No doubt in the future the marketplace will feel real".¹²

EXAMPLES

Faneuil Hall Marketplace in Boston is the first and most famous example of a festival market. Built in 1826 as a wholesale market district, the vacant buildings were reestablished as an active retail market. The restored market buildings sit in a prominent urban context facing Boston City Hall and the financial district. Restoration has since incorporated pedestrian plazas from

15. Faneuil Hall Marketplace, Boston.



existing 'working' streets. A link between the buildings and the streets is created by transparent sheds which offer sitting and eating places.

As a 'recreational' market, about seventy percent of business is derived from tourists.¹³ This tends to give the impression of an artificial rather than an authentic urban market – a place for tourists rather than locals. Regardless of its lack of authenticity, Faneuil Hall offers an interesting shopping experience that revitalizes a part of the urban fabric of Boston.

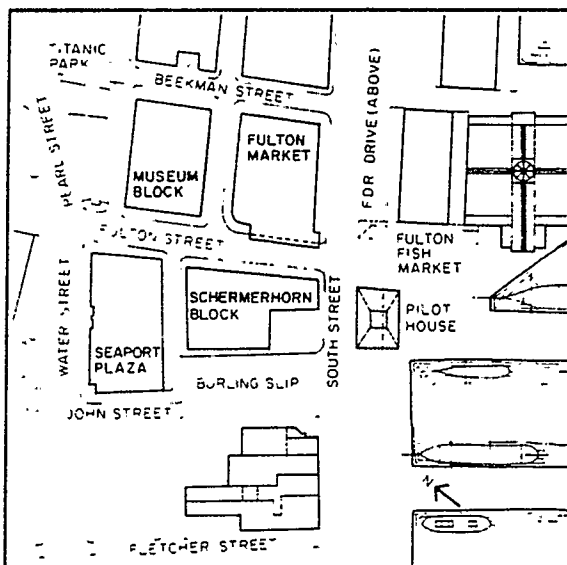
The South Street Seaport area in lower Manhattan was a bustling port in the eighteenth century. The seaport consisted of taverns, stores, warehouses and a wholesale fish market. Since its obsolescence as a center of maritime commerce and the subsequent threat of demolition in the 1960's, the South Street

Seaport has become a historical district. Buildings have been restored to house a variety of uses such as a museum and environmental theatre, wholesale and retail trade, offices and apartments.

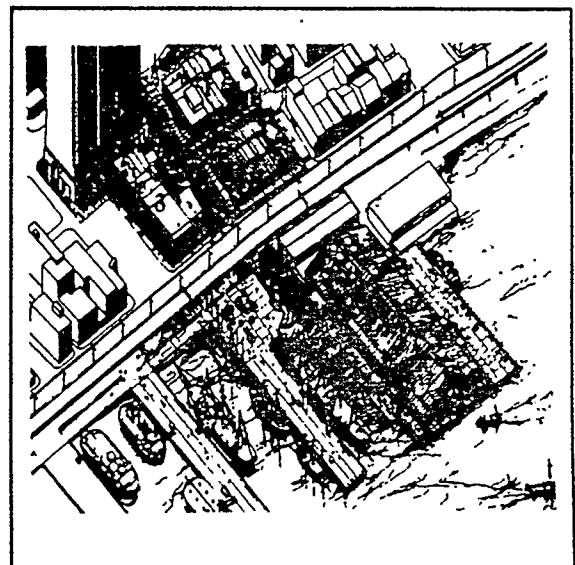
The Fulton Market, part of the Seaport area, is a new structure built to extend over the wholesale fish stalls that are still active along South Street. Echoing the historic models, the form is an open public hall with adaptable shed extensions. A metal canopy serves a similar function as that of the colonnade, affording shelter to pedestrians and cafes. The canopy extends the inner building space into the adjoining outdoor pedestrian street. The market street links the district to the East River.

The area combines a recreational market with a working market such as wholesale fish stalls and vendor food stalls combined with cafes,

16. South Street Seaport, New York.



17. Fulton Market.



restaurants, fast food outlets and a variety of sitting places to view the activities. The Schemerhorn Block, opposite the Fulton Market, houses specialty shops and completes the enclosure of the market street.

OBJECTIVES

Though different in function, the public and festival markets have a number of common aspirations: direct access and participation with the street, the desire for transparency between inside and outside space and food as the main attraction. Both types of markets are different from the shopping mall in a number of ways:

The internalized shopping mall turns away from the city, whereas the market becomes a part of it. The shopping mall seeks a mix of franchises and national chains. The market promotes local individually owned operations. The shopping mall is based on a predictable formula of anchor tenants and goods that have no significance of place. The market creates a sense of place by the mix of locally rooted tenants and goods.

"The tendency of the urban interior mall is to drain activity and economic vitality from the street. Interior malls can be seductive, comfortable shopping environments, but they conflict with the commercial habits and urban form that exists in the public realm of the memorable cities of the world. The

Galleria Vittorio Emmanuele in Milan and the Quincy Markets in Boston are exceptional examples of urban markets that are physically apart from the street but function in a traditional way as major gathering places for various activities."¹⁴

With the preceding discussion in mind, further objectives are:

- to tie the market into the fabric of the city – to make the public realm an active function of the market.
- to seek direct access and participation with the street.
- to link to other cultural and social events to extend the hours of operation and activity into the evening and weekends.
- to address the problem of parking associated with a regional center for shopping and gathering.
- to provide local community based operations rather than national franchises.
- to provide temporary as well as permanent spaces – short term as well as long term leasable areas.

SECTION IV THE NATURE OF STREETS

"A street wants to be a building equally organized as a space and structure as any other piece of architecture."

Louis Kahn.



INTRODUCTION: THE NATURE OF STREETS

"The perfect street is harmonious space. Whether it is confined by the near-hermetic houses of an African Kasbah or by Venetian filigree marble palaces, what counts is the continuity and rhythm of its enclosure. One might say that the street is a street by courtesy of the buildings that line it. Skyscrapers and empty lots do not a city make."¹⁵

The physical conception of the city and its streets has been under debate for years among architects and planners. The debate centers around two opposing physical conceptions of space. One conception, as Rudofsky so eloquently describes above, is a city carved out of a solid mass with streets and open spaces of different configurations and use. This is the image of the traditional

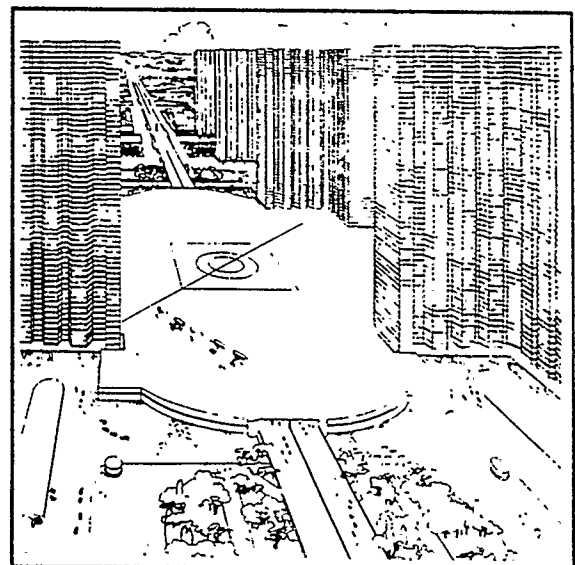
city; a contiguous pattern which forms the spaces between buildings as felt volumes. Françoise Choay describes the medieval city as "Buildings and streets which were inseparable; they defined each other."¹⁶ The well defined spaces and the mix of elements and functions produce streets that are literally and metaphorically exterior rooms in the city.

The other conception of the city and its streets is the arrangement of isolated buildings as objects sitting on a plane. The exterior spaces that are generated around the buildings have few characteristics of felt volume: the roadway, pedestrian way and flanking buildings are stretched apart and exist independent of one another. The link between solid and void and the function of place have been pulled apart thus reducing the idea of street to the conception of road. What the street

18. Open space as felt volume.



19. Buildings sitting on a plane.



as a road does not account for however, is the different types of traffic movement with respect to speed and purpose.

Louis Kahn investigated theories of separating streets to suit their function such as those for 'go traffic' and others as 'terminal streets for stopping'. These types are based on convenience and order and not always speed. "Shopping streets would have no go traffic. People meet in shopping places. Promenades would induce new and revive old and even ancient merchandising ideas. Now the shopping areas are islands in a sea of traffic."¹⁷

If the shopping street is for stopping and walking, it can conceivably be modelled after the traditional city where the emphasis has been on pedestrian movement and activity. Open spaces and buildings were of equal importance and offered a variety of uses.

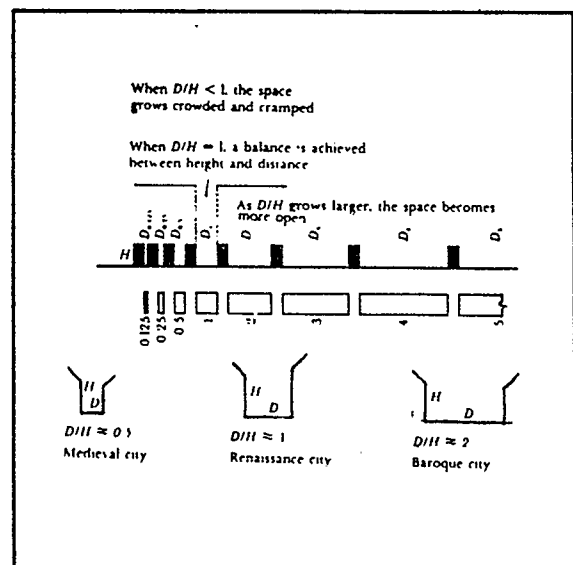
It is assumed that a similar environment can recapture the qualities of the ancient street in our own modern terms – the fine urban scale, the sense of community and the mix of activities focusing on the street. The use of the public realm is particularly relevant when surrounding a market.

SPATIAL QUALITIES OF THE STREET

Much has been written on the spatial qualities of the traditional city. The most important qualities are the relationship to the human scale, enclosure and the unity and equality of internal and external space. The notion of fronts and backs is also a noteworthy quality. The fronts of the traditional city relate to the street – formal and public. The backs relate to a courtyard – an alley or more private informal place.

The first two qualities, scale and enclosure, are important considerations of the public realm. The traditional street was generally no more than two to one as a ratio of height to width, giving streets a human scale definition. The proportions of exterior space of a one to one ratio conforms with the human scale, a balance in which one feels

20. Depth to Height Relationships.



comfortable.¹⁸

Modern urban streets are characterized by an ambiguity. On the one hand, the importance of blocks and buildings as pavilions in the landscape and, on the other, the importance of the street space they form. In the urban core the vertical to horizontal proportion of street space is often ten to one or more. These proportions are not conducive to comfortable space on a human scale.¹⁹

SOCIOLOGICAL REQUIREMENTS

The shopping street must be physically as well as psychologically comfortable. The physical qualities are particularly important if the place is to be utilized in the winter. This issue will be discussed further in Section V.

William Whyte's book *The Social Life of Small Urban Places* offers criteria for designing successful outdoor spaces. His research is based on extensive observation with respect to physical and psychological comfort of people in urban spaces. The following criteria will be considered in the design of the outdoor spaces of this project:

Self congestion: People like to move in the main flow. They stop to converse (even when it blocks traffic) and commonly sit in the mainstream. "What attracts people most, it would appear is other people."²⁰

The natural junctions and transfer points of paths are major gathering locations.

Enclosure: People station themselves near objects and well defined spaces that offer something solid behind them and a sense of security. People rarely choose the middle of a large space.

Sitting places: People will sit almost anywhere when seating is provided, thus the most successful open spaces are those which offer many places to sit. Seating can include steps, benches, moveable seating and railings.

Sun and Wind: People sit in sunny places. Warmth is as important as sunlight. People seek suntraps which have an absence of wind and drafts.

Trees: Trees should be incorporated into sitting areas because they provide a psychological sense of enclosure much like the awnings on a street cafe or a colonnade. Foliage also provides a pleasing combination of shade and sunlight.

Water: Water can offer a feeling of privacy by masking conversation with white noise. Also people enjoy splashing and touching water, thus it should be made accessible.

Food: Food attracts people who, in turn, attract more people. "If you want to seed a place with activity, put out food."²¹ Vendors satisfy a demand for outdoor eating.

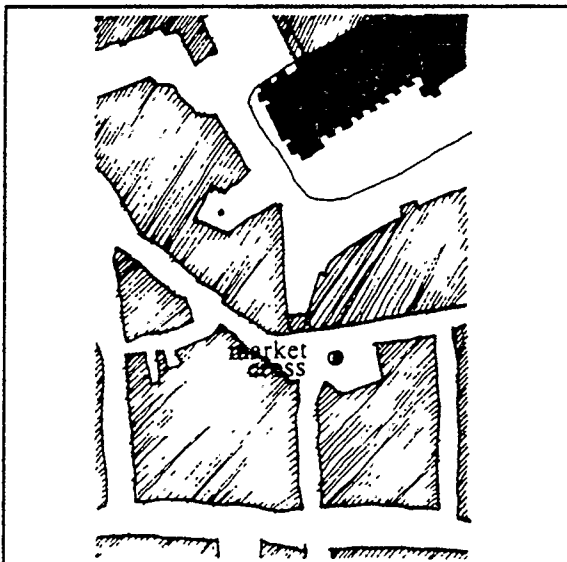
In addition to Whyte's findings, snow and ice play an important role in our winter climate.

Snow and Ice: Snow drifts and ice sculpture can be art. Bright colors contrasted against the white makes for a vibrant combination in the winter setting.

ELEMENTS

Street furniture, sculpture, symbolic landmarks, and trees give open space animation and focus. They can convey its social or cultural meaning. The 'market cross', for example, was always an integral part of the medieval market square. It symbolized the 'market peace' – the selling of goods at just and fair prices.

21. The Market Cross.
Butter Market, Canterbury.



Sculpture, water, and trees also serve environmental and psychological needs. Observations of human behavior in urban spaces reveal the importance of these elements. Physical objects (and street characters) can prompt what Whyte calls "triangulation – a process by which an external stimulus provides a linkage between people and prompts strangers to talk to each other."²² For example, street bands and touchable sculpture are elements that draw people together.

OBJECTIVES

The use of the public realm is still valid today. It can provide a space that connects one part of the city's fabric to another. The main objective is to create a positive void among building solids. The objectives derived from this section include:

- to provide a scale at the street level that is in keeping with the human scale (a depth to height ratio of one to one or two to one).
- to maintain a sense of enclosure by clearly defining the edges of a street.
- to articulate the floor and walls of the street as an extension of the building.
- to provide a choice of paths and public places in terms of spatial experience, mood and activity.

SECTION V THE CONTEXT AND SITE

"whatever *space* and *time* mean, *place* and *occasion* mean more – for *space* in the image of man is *place*, and *time* in the image of man is *occasion*."

Aldo Van Eyke.



INTRODUCTION

A market which is located in the heart of the city – and links to Prince's Island Park and the festive Barclay Mall – has the potential of becoming an integral part of the public life of Calgary. Prince's Island is a hub of activity for cultural events in the city. The Jazz Festival, Island Folk Fest, Caribbean Days, Sunday band concerts, Canada Day and Heritage Day celebrations and a Winter Festival attract visitors and locals from all over the city. An air of celebration is ever present. The scenes are constantly changing from ice sculpture to band shelter, from exotic food pavilion to hot dog vendor, from singing minstrel to Ukrainian dancer.

Recreation attracts people on a more regular basis year round and complements the periodic cultural events. Around the island, activities such as swimming, sun tanning, football, frisbee, picnics, strolling, jogging and bike riding are a common sight. Special activities in the winter include public skating, hay rides, parachute events, tethered balloon rides and dog sled races. To accommodate these users, hot dog stands, ice cream and coffee vans cluster along the main walking path.

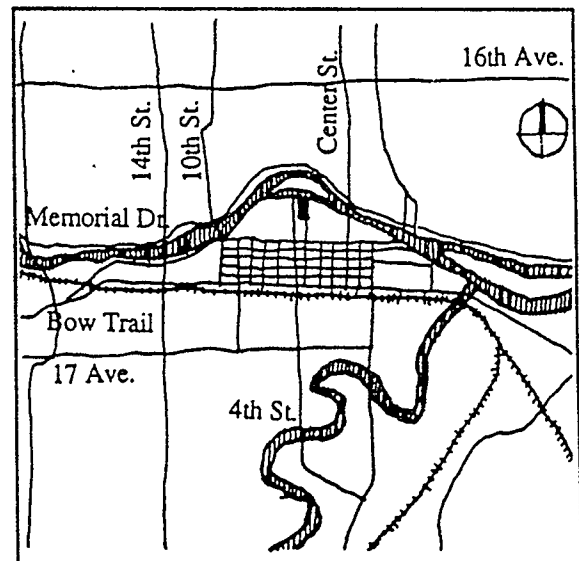
Prince's Island and its surroundings offer a valuable natural place for people to gather, to linger, to enjoy music and entertainment in a setting that is removed from the noises of the city.

BACKGROUND

The site of the proposed market is part of the Eau Claire district. Named after the lumber company that historically occupied the site, it is located on the northern edge of downtown Calgary. Comprising of both publicly and privately owned land, the Eau Claire area has promise of being an active urban district quite different from the dense downtown office development. It is for this reason that the Eau Claire area draws so much attention.

Until the 1980's, the area has been on the outskirts of the development rush. Following the closure of the Eau Claire Lumber Company in the 1940's, the area remained idle for forty years. A mixture of uses have occupied the land including low density residential, parking lots, warehouses and transit garages.

22. Location Plan.



Eau Claire and the Bus Barns have since been the subject of numerous City Planning studies and proposal calls. The proposals have widely varied from a vast city park to a major urban residential district. In the end, residential use was widely accepted among city officials. The *Eau Claire Design Brief* (1974) sets out the following broad planning objectives:

- residential use from Second Avenue to the river.
- heights gradually decreasing toward the river.
- a transitional zone for parking between the office and residential development (Second to Third Avenues).
- the concentration of community facilities to be along Third Street.
- the intersection of Third Street and the riverbank pathway to be developed as a main focal point of activity.
- the provision for a pleasant and attractive human-scale pedestrian environment.

Many of these objectives have been compromised over the past decade. The decision to build residential towers ranging from four to twenty-five stories on the river and a forty-five storey office tower in the transition zone of have all but obliterated the idea of a transition from the city to the river or the idea of a human-scale environment.

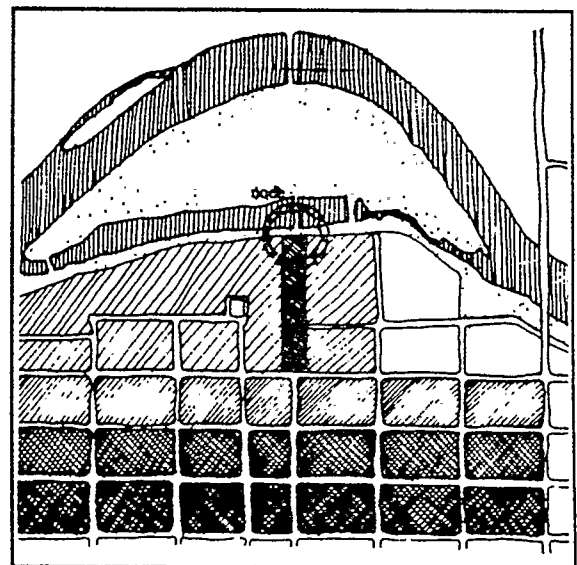
THE CONTEXT

The design for the market has been influenced not only by historical and contemporary marketplace models but also by the unique nature of the site and its context. A number of physical and natural features, such as the districts, the river and park, the paths and streets and the existing and proposed buildings have encouraged and contributed to the definition as a the focal location in Calgary.

DISTRICTS

The following districts that surround the site will have a direct affect on the market. Its success is dependent upon direct connections to residential and commercial uses: the Downtown Commercial District, Chinatown, and the residential districts north of the Bow River. The

23. Proposed Zones.



Downtown Commercial District is a most dramatic image in Calgary's urban landscape. Like the mountains, the office towers rise up from the ground to sixty stories in a condensed area. Views from the market can take advantage of this strong image. The offices from above will have views of the market roofscape, the river and the island beyond.

A definite edge is created along Third Avenue by these towers. The wall of high rise buildings to the south of Eau Claire and the natural escarpment to the north define and enclose the site.

Chinatown is a unique ethnic area with restaurants, businesses and a close knit residential population. Within this small urban district, there is a sense of vitality and an active street life. Celebrations, festivals and other Chinese traditions keep the area alive during the day and in the evenings, and especially on the weekends.

The scale of the buildings are much lower than those of the commercial core. The shops, restaurants and apartments focus onto the streets and sidewalks. Consequently, Chinatown provides a pleasant living and walking environment which has contributed to the area's success. A distinct character is created by Chinese motifs, signage and street furniture reflecting the origins of the community.

The most recent addition to China-

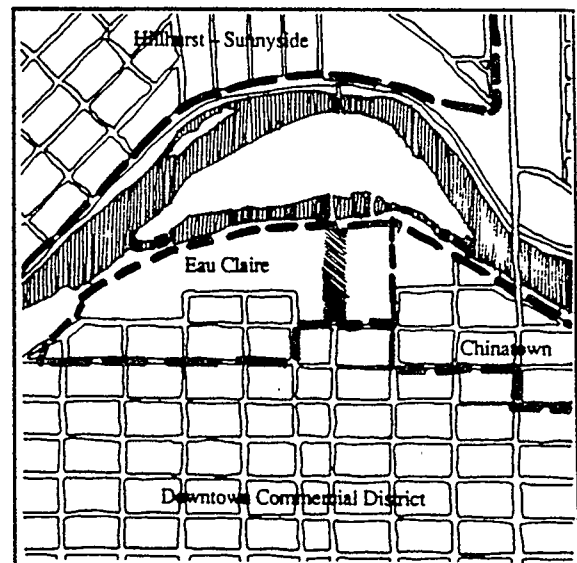
town is the Chinese Cultural Center which will include the closure of Second Avenue to traffic, however this will not affect pedestrian links to the Eau Claire site.

NATURAL FEATURES

Eau Claire forms part of the valley between the Bow River escarpment and the dense urban landscape. The Bow River – that runs through the valley – creates a natural edge to the north. The escarpment beyond forms a natural wall around the river, Prince's Island and Eau Claire.

The Bow River is an important natural element that links the city to the foothills and the mountains. A lagoon, a section of the Bow that runs between the site and Prince's Island, is controlled at both ends by weirs. Water flows at a slower pace

24. Districts.



which is suitable for wading, swimming, and paddle-boating.

During the winter months the lagoon is full of either thin ice or mud, making it almost impossible for skating or other winter sports. The relocation or removal of the weirs would make the lagoon a more useful year round amenity.

One of the most important natural features surrounding Eau Claire is Prince's Island Park. It is a cherished amenity in Calgary. As a retreat within the dense urban fabric, it offers many sights and sounds different from those of the city which is located only one block away.

The island is populated mainly with poplar, cottonwood and evergreen trees. These species offer shade in the summer and greenery in the winter. Part of the island is devoted

to an ornamental flower garden where band concerts are held in the summer.

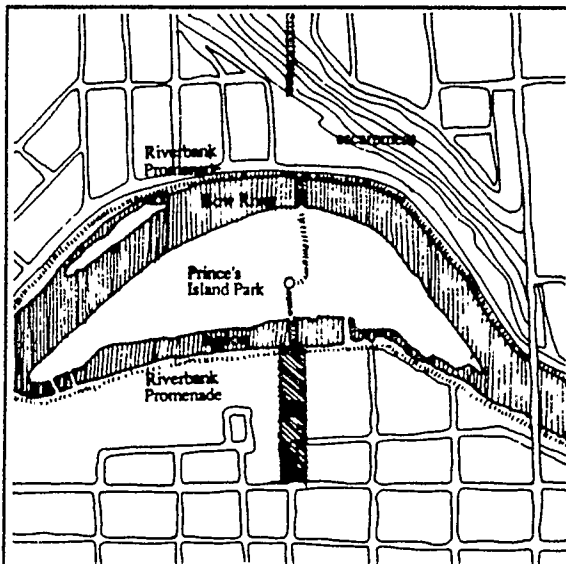
The island has few built structures. A cupola, a remnant of one of the city's original schools, is a major landmark on the island. The cupola and a small pavilion for snacks and public washrooms are the only two permanent structures on the island.

The main path links Prince's Island to the residential districts with a series of bridge crossings. The route has a processional quality much like descending from the *acropolis* to the *agora* in Athens. The footbridges act as raised viewpoints and are visual landmarks.

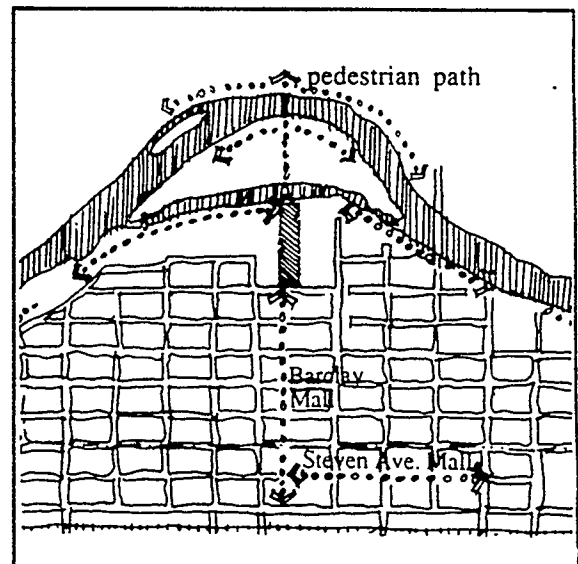
PATHS AND STREETS

The main pedestrian paths that cross the Eau Claire site are of major

25. Natural Features.



26. Pedestrian Paths.



importance to the market proposal. The major paths include the Barclay Mall (Third Street) and the river pathway system. The Barclay Mall is on axis with the footbridge and offers a major pedestrian path from the downtown through Prince's Island Park to the residential areas north of the Bow River. The path is a significant route for the many people who use it to travel to and from work. At noontime, workers use the route as an access to the river pathway and the park for impromptu lunches.

Another significant pedestrian access is the river pathway system that runs along the Bow and Elbow Rivers connecting the southern edges of the city to areas in the north west. The perceived center of the path system is Prince's Island Park. The area where the bike path crosses the footbridge is a major place to gather in a central location along the route. The riverbank also offers a pleasant path linking the surrounding districts, such as Chinatown, the Kensington commercial area and the Hillhurst-Sunnyside residential area to the site.

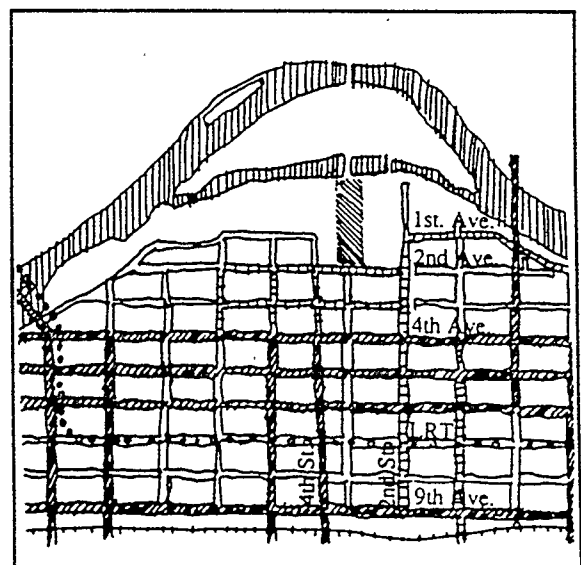
The Eau Claire area is relatively well served by vehicular routes from all over the city. The secondary and local roads that surround the site link to major routes such as Center Street, Fourth and Fifth Avenues and Fourth and Fifth Streets. The city has proposed to close part of First Street and Third Avenue at the site of the proposed market.

The site is within five blocks of the Light Rail Transit system that serves all of the downtown area. It is a pleasant walk from the L.R.T. stop through Barclay Mall to Eau Claire. Improved bus routes, including the downtown shuttle, will become available as the area develops. Future plans include a jitney service from Ninth Avenue to the Market site which will be run by the Market operators.

EXISTING AND PROPOSED BUILDINGS

The area – in its present form – is without a definite character. It is defined more by the natural surrounding than by any internal characteristics. The isolated buildings that exist around the site are only part of the proposed fabric for the Eau Claire district. These buildings

27. Vehicular Access.



include: the vacant Bus Barns, the Eau Claire residential towers (phase I), and the Y.M.C.A. The proposed buildings for the Eau Claire area include: Eau Claire towers (phase II and III), Eau Claire terraced housing and a hotel/office complex. The mixed use quality of the area will be complete if the proposed development takes place. This will produce a larger local residential community for use of the market. The developments – proposed and built – will strengthen the spatial significance of the market and the cohesion and character of the Eau Claire District.

HISTORICAL ROOTS

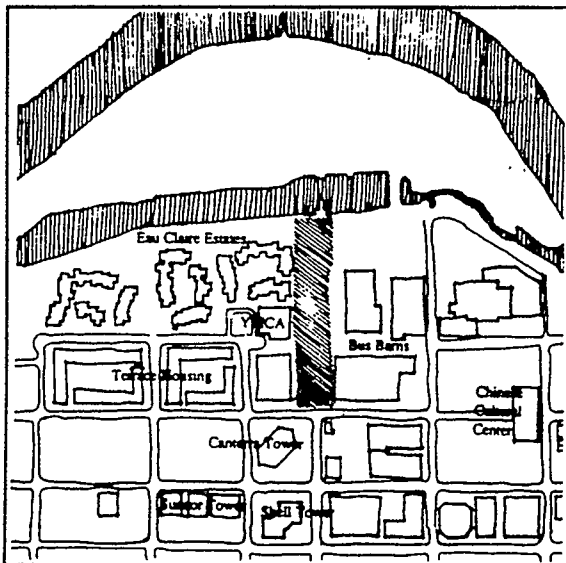
When Calgary was incorporated in 1884, the original settlers were located in the area between the river and railway lines. Before these settlers, the sheltered valleys of the Bow and Elbow Rivers were used as

wintering grounds by the Plains buffalo. Local Indian hunters, followed by whiskey traders were attracted to the area. The R.C.M.P set up Fort Calgary to control the whiskey trade in 1875. A Hudson Bay Trading Post followed shortly after.

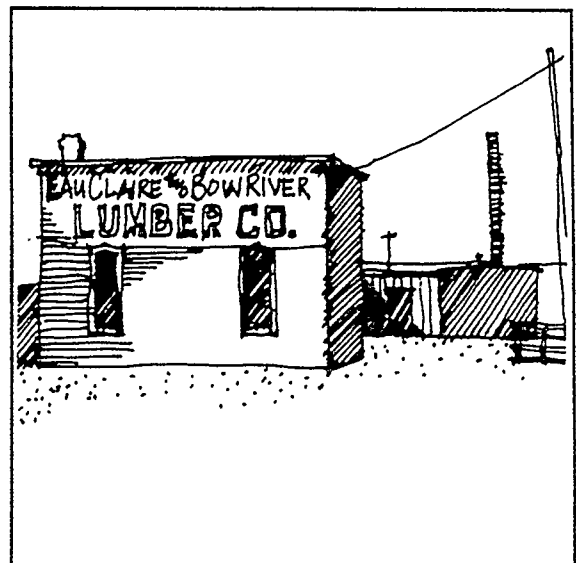
Around the time of Calgary's incorporation an American mill owner, Issac Kerr, was encouraged to expand his lumber operations into Western Canada. In 1866, he set up a mill on the shores of the Bow River near Third Street and First Avenue. He moved the entire operation including a Scandinavian work force from Eau Claire, Wisconsin, to Calgary, hence the name Eau Claire Lumber Company.

The residential tradition of this area has always been strong. Worker's cottages and single family dwellings were built between 1887 and 1900

28.Existing and Proposed Buildings:



29. The Eau Claire Mill, 1892.



around the Eau Claire mill because it was an ideal location for city workers prior to the public transit system.

The fast flowing Bow River was initially a hinderance for the movement of lumber and was prone to flooding in the low lying areas. Peter Prince, the manager of the company, blasted out the peninsula which jutted into the Bow River to create a controllable channel for transportation of the lumber. This became what is now known as Prince's Island. The company also developed a mill pond for storing lumber adjacent to the mill which was later filled in. The mill shut down operations following the Second World War.

THE SITE

The site for the proposed market is a focal point within Calgary's downtown. It is considered to be one of the most attractive locations in the urban setting and a 'front door' to the downtown. Coming from the urban center, the site links a special pedestrian street – Barclay Mall – to the island. At the end of the special street the Eau Claire site provides a major point of public access to the riverbank for the city as a whole. For these reasons it is important not only as a place of commerce but also as a place of public gathering, intersection and passage.

DIMENSIONS

The site is approximately three hundred meters long by fifty meters wide. The city owns this site and the two adjoining sites, both of which are available development. Three vacant Bus Barn buildings sit on the adjoining two sites. At present, all these sites are used for parking.

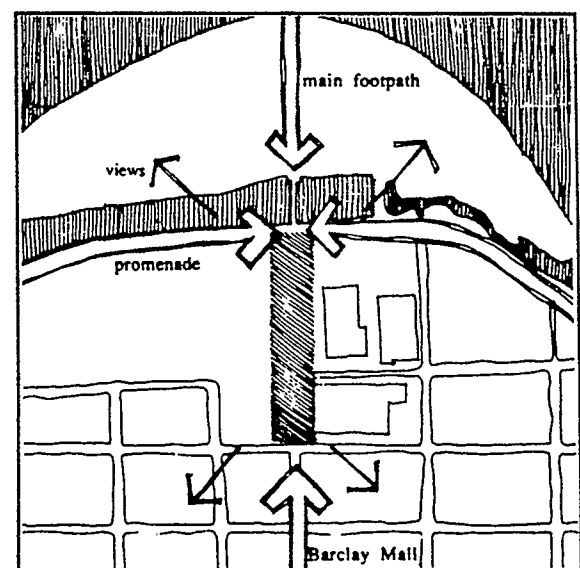
TOPOGRAPHY

The site is virtually flat. The only change of elevation is at the river which drops approximately three meters at the north edge of the site.

SERVICES

The gas, power, telephone, sewer and water supply lines are located under Third Avenue and turn west at the river edge. These lines will be

30. Focal Site.



affected by any new construction in the area.

FLOOD RESTRICTIONS

The site lies on a floodplain which is a low area of land subject to flooding in extreme conditions. With a high water table, building on the site is expensive, but possible as long as floodplain guidelines are met (see Appendix C).

PARKING

With the development of the site and the adjacent area, parking will become an increasing problem since much of the existing parking will be lost. The existing lots are currently used by office workers on weekdays and on the weekends by visitors to Prince's Island park. Parking on the other side of the Bow River will still be available.

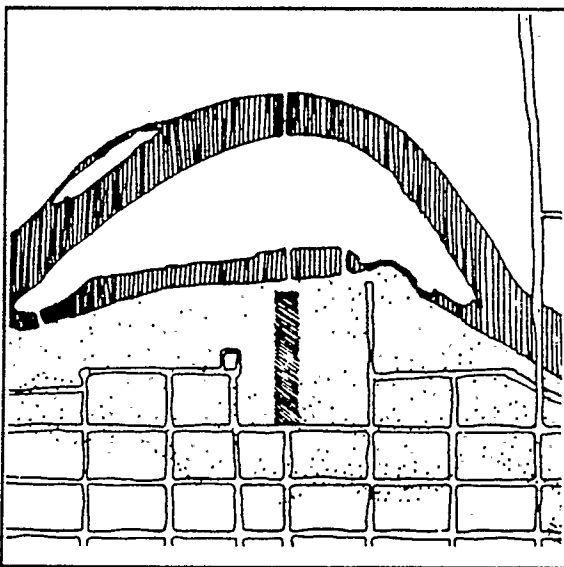
A requirement for developing the site is immediate on-site parking and off-site parking within one block for evening and weekend use (see Appendix B).

CLIMATIC ENVIRONMENT

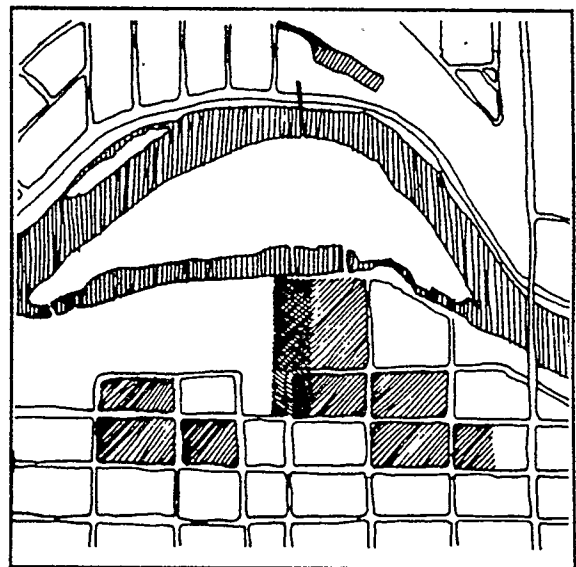
Sun: Calgary enjoys one of the highest average hours of sun in the country. The annual average hours of bright sunlight is six hours daily, ranging from a maximum of 10.4 hours in July to a minimum of 3.1 hours in December.

The sun is an important component of both indoor and outdoor activities. It will affect the physical and psychological well being of the users. Office developments tend to shade much of the southern portion of the site in the winter. The northern section of the site, how-

31. Floodplain Area.



32. Existing Parking.



ever, is unobstructed. It has the potential for greater solar exposure and use of open spaces. Sunlight protection guidelines have been outlined for the riverbank promenade and Third Street (see Appendix C).

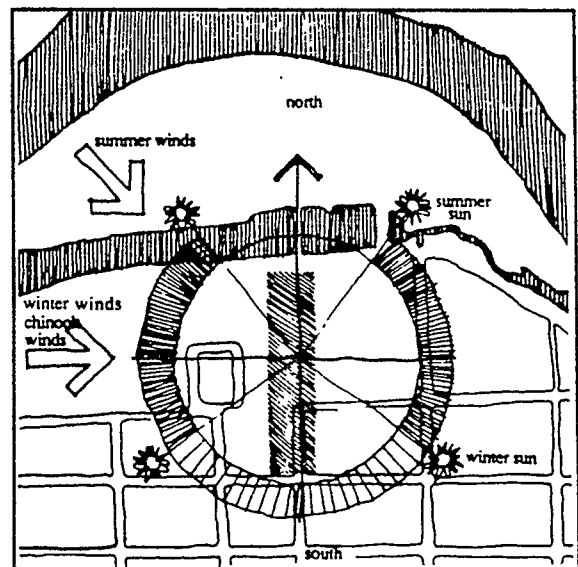
Wind: The prevailing winds are from the west. West winds, interspersed with bursts of cold Arctic air dominate in the winter. The winds shift to a more northerly direction in March, then turn to the north-northwest in April. In October however, the west wind predominate once again. Wind speeds vary from season to season. The peaks are highest in the fall and the spring. Summer has the lowest wind speeds.

The chinook – particular to the foothills – is a warm, dry wind that moves across the Rockies from the Pacific. These winds are usually from the west-northwest to the west-southwest and can increase winter temperatures by as much as twenty degrees Centigrade in a matter of hours.

In the winter a wind chill index is used to calculate temperatures. This index is based on temperature, wind speed and available solar energy. When the wind-chill values are extreme, outdoor activities can become dangerous. Exposed skin will freeze in less than one minute, an event which occurs in Calgary an average of one day per year, usually in December or January.

Snow: Calgary receives an average of one hundred and twenty eight centimeters of snow during the winter months. The greatest mean snowfall is in March and the least in January. With such wide variations in temperatures during the winter months, there is an unpredictable amount of snow cover. Therefore, it is difficult to plan for outdoor events such as snow and ice sculpture. For example, the Winter Festival on Prince's Island took place in February, 1986 without snow and temperatures of two degrees Centegrade.

33. Climatic Environment.



OBJECTIVES

Based on previous discussion the following points are considered important:

- to strengthen the link between the park and the site to encourage the extension of cultural and recreational activities.
- to incorporate a major point of public access with the River pathway and Prince's Island.
- to take advantage of the views north to the river and escarpment and south to the city skyline.
- to take advantage of the rivers edge and make it more accessible to the public.
- to respect and strengthen existing paths of movement and articulate special point of access and intersection.
- to provide sheltered bus and drop off points at major access points.
- to consider winter and summer use of the site and to optimize the use of sun, snow and ice.
- to location public outdoor cafes, balconies and sitting areas on the south and west side and provide protection for north and northwest outdoor areas and entrances.
- to provide a choice of sheltered public paths through the site.

SECTION VI THE DESIGN PROPOSAL

"Design is putting something into being."

Louis Kahn.



SUMMARY OF OBJECTIVES

The proposed design represents a consolidation of the ideas and objectives that have been discussed in the preceding sections. The solution was developed out of two factors: an understanding of the market tradition and the unique nature and location of the site. This has resulted in a response of two parts – urban and architectural – which conceptually forms an entity.

Before presenting the design proposal, a summary of urban and architectural objectives are:

URBAN OBJECTIVES

- to apply theories about public space which promote a livable environment and an active street life.
- to link the market to a main path and other public functions.
- to seek direct access and participation with the street.
- to maintain a sense of enclosure by clearly defining edges of the street.
- to seek a scale in keeping with the pedestrian.
- to provide a range of public spaces and amenities.
- to incorporate a major point of public access with the river.
- to strengthen the link between the park and the Eau Claire site.
- to consider winter and summer use of outdoor space.

ARCHITECTURAL OBJECTIVES

- to design a market building that emerges out of the nature of the market tradition.
- to provide a hierarchy of high and low spaces evoking the basilica form.
- to provide outdoor sheltered space evoking the colonnade.
- to provide a simple, logical plan, organization and structural system.
- to provide a highly flexible, linear space.
- to provide an abundance of natural light.
- to provide both temporary and permanent vendor stalls.
- to provide a humble, background building in the aesthetic sense.

The response to these objectives will be discussed through the explanation of the design proposal.

SITE SELECTION

Of the city owned land available for development, the lot linking to Third Street was chosen for the new market structure. This was for two reasons: first, the location of the market is reminiscent of the medieval broadened street which links to a main path and second, the building acts as a focal point acknowledging an end of a special street in the city. This configuration also lends itself to a linear structure.

By placing the building on Third Street, the market provides public amenities and paths leading directly to the park, the river and the residential community beyond. A future phase of the proposal would be the development of residential units on the remainder of the city-owned Bus Barns sites, thus utilizing the land for more than just as a marketplace.

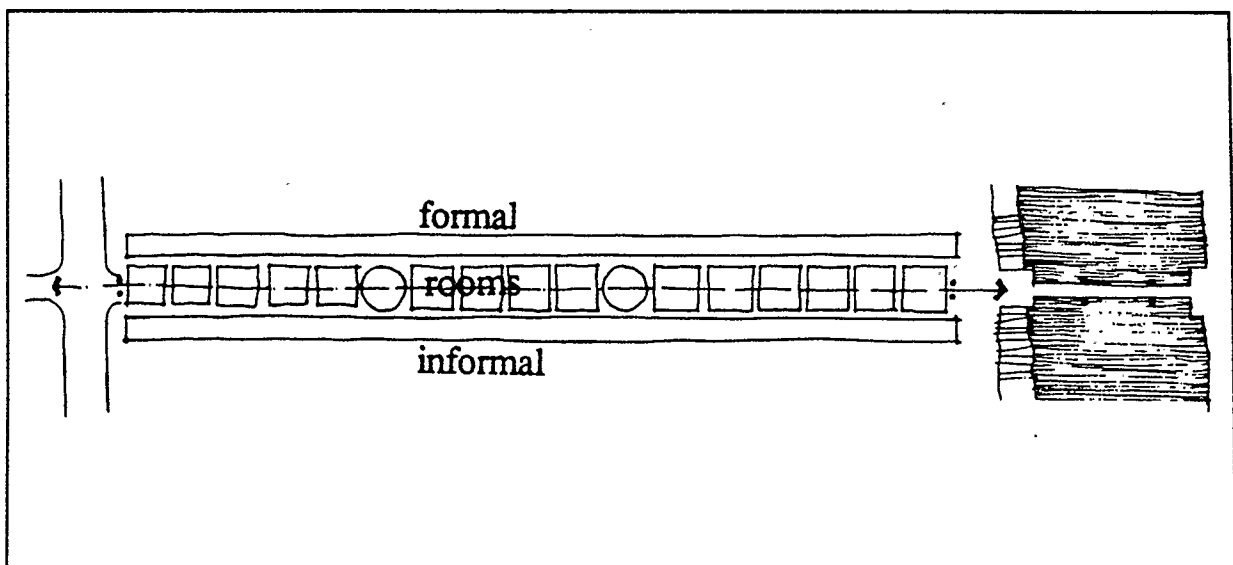
The city's objectives have also been acknowledged. Their view is for a residential use in Eau Claire with the concentration of district facilities along Third Street.

URBAN CONCEPTS

The overall unifying concept is the progression of public spaces from the urban edge to the river. Taken further, the concept incorporates the idea of buildings, streets and open spaces as a series of rooms from the city to the water. Ultimately, the proposal is an exploration of architectural procession.

The duality of urban spaces, formal and informal, reflect the wide range of socio-cultural functions performed in the city. The formal street – grand plazas, avenues and promenades and the informal street – narrow streets and back alleys are the two polarities that have become the main organizing concept for the outdoor rooms of the proposal. The two paths on either side of the main structure are articulated as different rooms. The front street is a formal promenade and the back is an informal, tight space like an alley.

34. Series of Spaces.



THE SITE PLAN

The design represents two distinct environments: the built and the natural. The response to the transitional nature of the site is a combination of three elements: market buildings, streets, and gardens. The market building is placed toward the urban portion of the site and the garden is placed toward the river and park thus the overall form becomes a series of solids and voids. The solid mass occurs near the urban end of the site and the void toward the natural end.

The elements that are placed along the site incorporate the existing program components: a market, retail shops, offices and/or studios, cafes and restaurants, and a winter garden (see Appendix B). These components are organized along a line and relate to the different character of formal and informal outdoor rooms and the

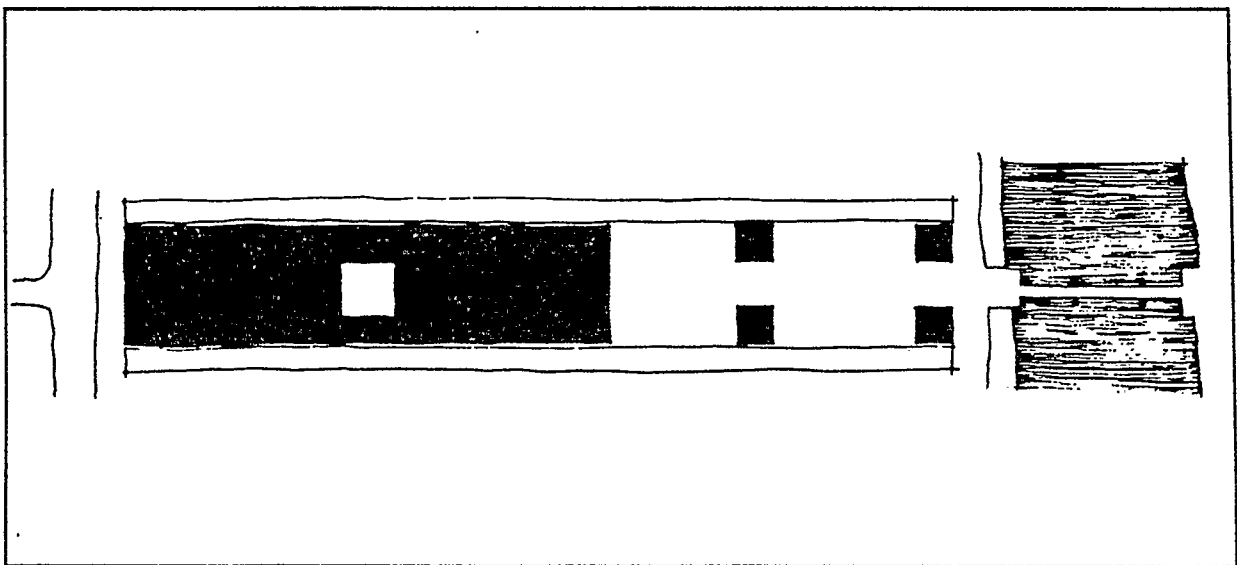
transition from urban to natural.

A symbolic gate is placed at the urban end of the site to mark the beginning of the market area and the uniqueness of this portion of Eau Claire. Two levels of shops are placed along the formal promenade fronting the Y.M.C.A. and the future hotel. A recreational market and working market meet to form the enclosure of the informal market alley on the east side. Along this informal street, artists studios, residences and galleries link the market street with craftsmen in the new market building.

The winter garden is a central focus of the market structure. It acts as a refuge from the noise of market activities and is a landmark for traffic coming up First Avenue.

The restaurant and cafe components are pulled away from the main

35. Solids and Voids.



building to become four small pavilions sitting in the garden. The indoor and outdoor areas offer views to the skyline and river. They are pleasant places to dine and relax surrounded by greenery and will bring life to the area in the evening when the market is closed. Two of the pavilions and a courtyard mark the crossing of the main pedestrian paths at the start of the footbridge.

The ends of the formal and informal streets are articulated by two platforms by the river. These platforms are placed between the trees with framed views to landmarks on Prince's Island. From the viewpoints, ramps lead to a lower terrace at the water's edge.

The main focus of the buildings is on the street. At street level the structures are outwardly oriented, tying the street to the market. This enhances life on the street by linking

to other recreational, hotel, and cultural functions. The intent is to bring people to the area after working hours and on weekends – to inject people and activity onto the sidewalks.

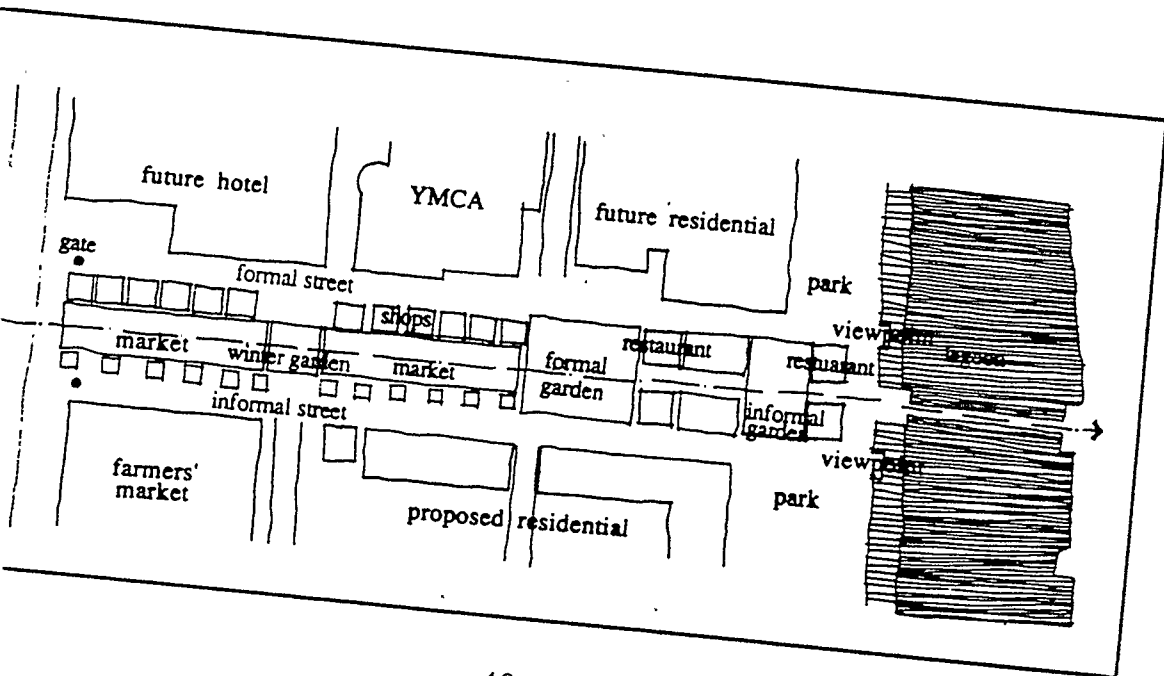
CIRCULATION

Pedestrian Circulation:

The pedestrian is the most important participant of this proposal, like the pedestrian in the traditional city. The focus on the street allows people to be a part of everything – the shops, the weather and the vendor traffic – all adding to the experience of shopping.

The pedestrian environment heightens the senses; the change of seasons and a strong acceptance of place. Although there are many examples of successful commercial streets in cold climates, such as Banff Avenue

Site Elements.



and Kensington Street, the indoor mall environment has become the accepted norm.

In a winter city, like Calgary, this open environment can be accommodated with a few considerations such as colonnade spaces, sheltered entrances and wind sheltered, sun oriented sitting spaces. Landscaping will provide a wind screen and help to gradually introduce the pedestrian to windy areas.

Public Vehicular Circulation:

The automobile enters the market at it's perimeter edge both for circulation and parking. Auto orientation is important. The main route coming from Center Street is First Avenue. Second Avenue brings people from the west and south. It is at this edge that a drop off and bus stop are located. Public traffic on both the formal and informal streets is restricted to delivery, emergency

and service vehicles.

Vendor Vehicular Circulation:

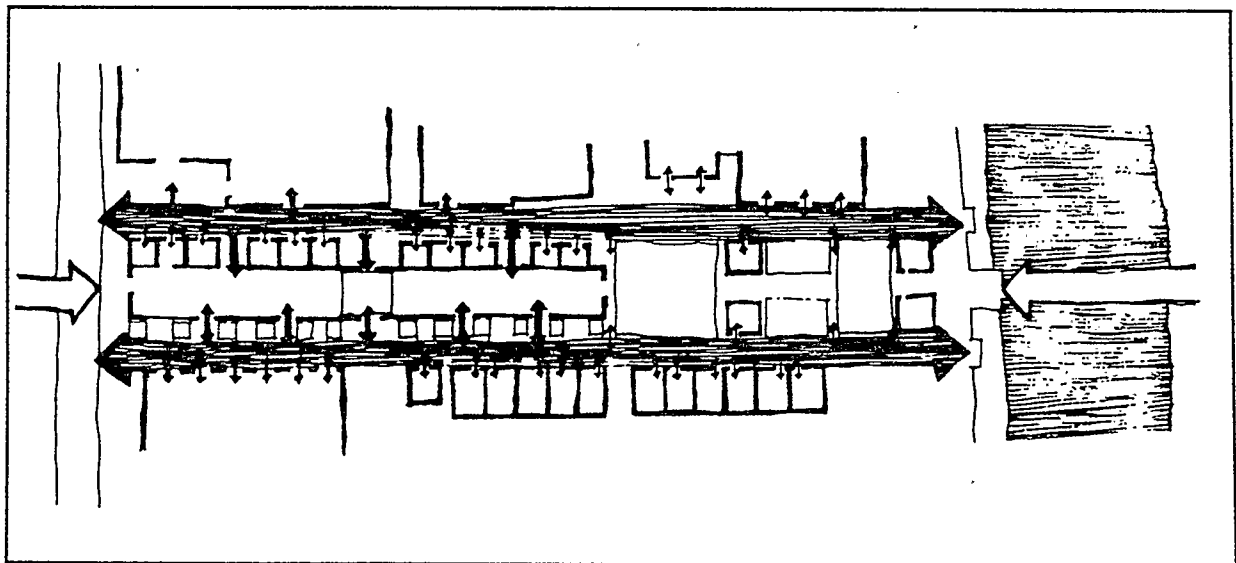
The streets along the market will only be used during designated times for deliveries, the unloading of goods and for special outdoor market events. Otherwise, they are given over to the pedestrian.

Plus 15: The Plus 15 terminates at the edge of the market district in keeping with the city's existing and proposed plans. There is a proposed link from the Canterra Tower to the future hotel. The Plus 15 will not however, penetrate the market area because emphasis is on the use of the street, not on diluting its strength.

PARKING

The parking will have an impact not only on the commercial development but also on the users of the Prince's

37. Focus on the Street.



Island Park. Congestion in the area may become a problem, like the nearby Chinatown district. In the long run, public transit (L.R.T., downtown bus shuttle, and a jitney service on Barclay Mall) will be needed to help alleviate the problem.

The requirements for parking are based on net rentable space which is approximately two hundred and ninety stalls (one hundred stalls on-site and one hundred and ninety stalls off-site). To address this problem the proposal incorporates both surface parking and underground parking.

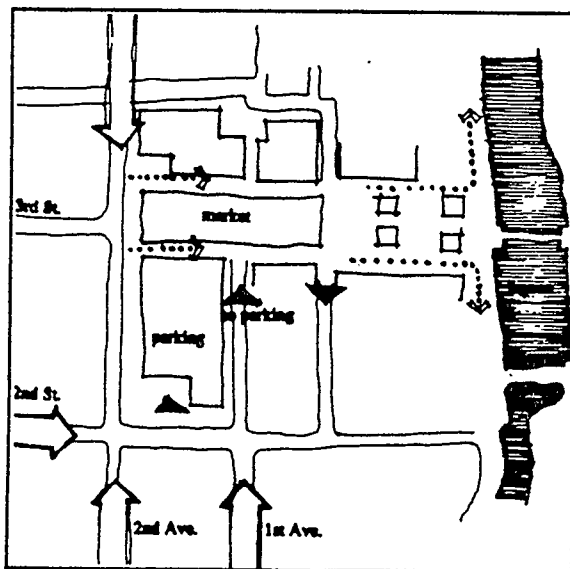
The surface parking, in one of the existing Bus Barns, would provide three hundred and fifty stalls. This space, however is shared with the farmers' market. Scheduling of market events will put constraints on parking availability, but with the amount of underground parking provided this should not be a

problem. Surface parking is also available at the sides of the farmers' market which will provide additional space for customers and vendors.

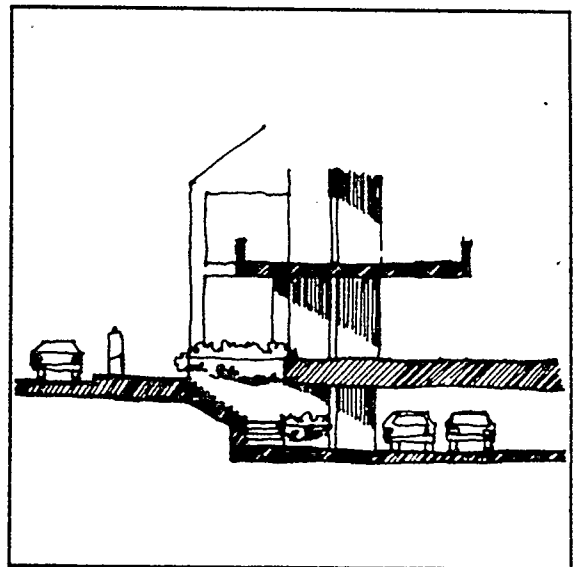
With the high water table, underground parking is feasible but expensive. Though expensive, it is necessary for close proximity to public amenities. Also, it takes advantage of the one meter 'dead space' resulting from restrictions in floodplain areas. This parking will provide three hundred and forty stalls amply fulfilling the program requirements.

The proposed underground parking is entered from First Avenue and exited nearer to the river. Upon entry, the parking level is designed to have pockets of light that orient the driver to primary points of access up to the street. These public entrances would provide clues to the

38. Vehicular Access.



39. Pockets of Light.



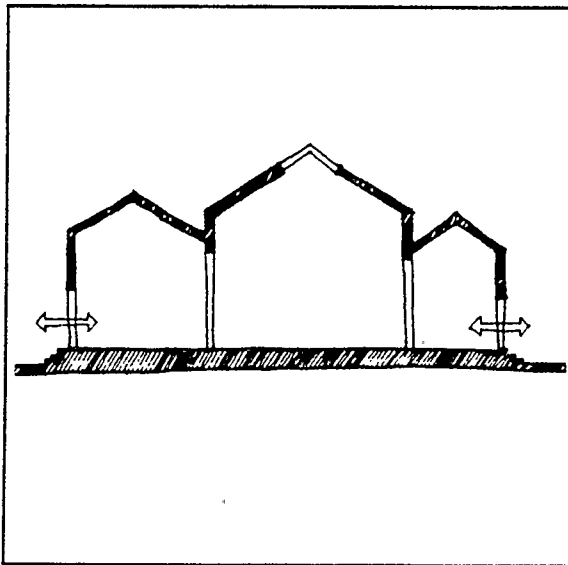
lively market functions above. The prime points of access include the gate, the garden and the footbridge linking to Prince's Island.

ARCHITECTURAL CONCEPTS

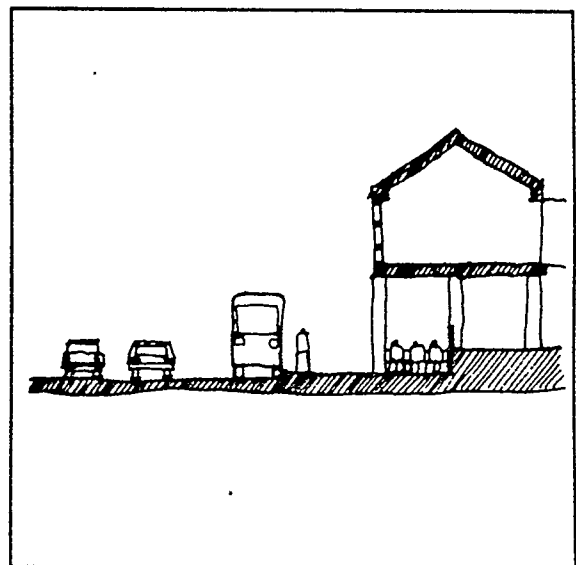
The market building echoes the prototypes of the past but with a distinct sense of the present. The main concept is a hierarchy of spaces, nave and aisles, set upon a strong base that anchors and links it to the street. The nave is articulated as a series of connected rooms rather than an uninterrupted linear form. The repetitive skylit courtyards are reminiscent of the Islamic *bazaar*. The simple, regular pattern of rooms and the linear space recall the *stoa*, the basilica, the colonnade, and the market halls of the past.

The articulation and scale of the aisles respond to the formal and informal outdoor streets. The aisle on the promenade street is a collection of pavilions that express a formal yet novel character. A smaller aisle encloses the informal alley and acts as a sheltered outdoor market area. As a public walkway, the pavilions reinforce the existing Third Street path. Space heaters installed for winter use would make for a pleasant and safe walk to the park.

40. Nave and Aisles.



41. Pedestrian – Auto Interaction.



THE BUILDING ELEMENTS

THE GATE

The gate, comprised of two single landmarks, symbolizes the threshold between two different worlds – the world of skyscrapers pointing to the future – vertical, silent, solitary and aspiring – and a contrasting world of the ancient market linked with the past – horizontal, social, practical and connective. The gate serves as a landmark for meeting and a place where vehicles and pedestrians interact. Bus stop seating, bike storage and information boards are located there.

THE MARKET

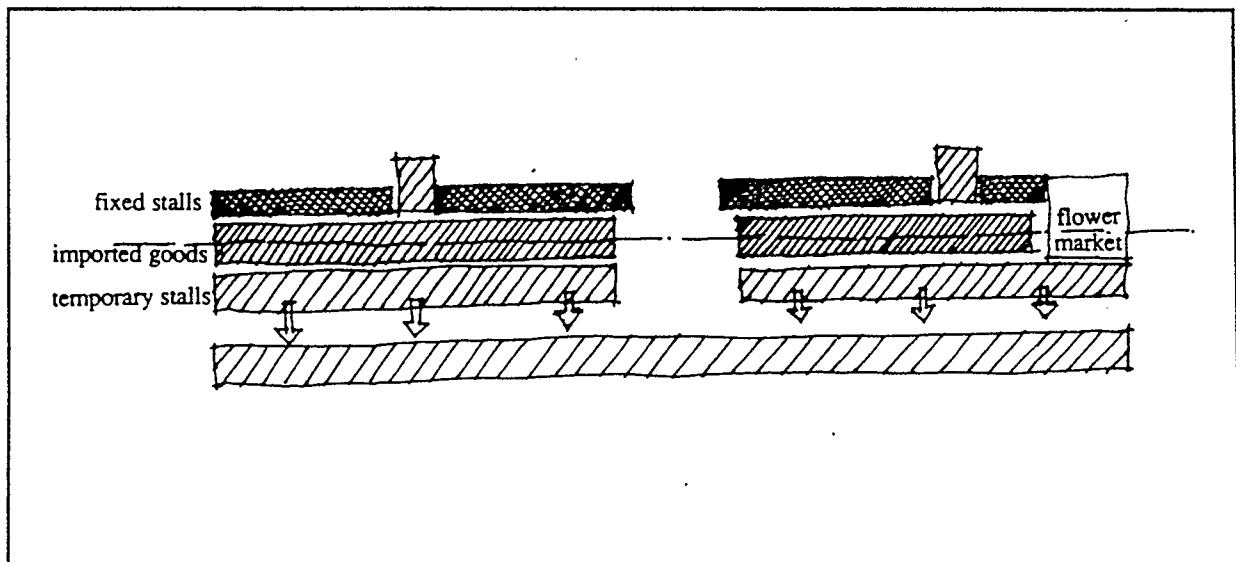
The market is the main focus of the project largely because it creates the stage for a dynamic urban environment. The variety of products and

the manner of their display are as critical as stage sets. The building is open and inviting. In itself, it is a background to the color, light, and activity of the space. Bridges and balconies from the second level offer views to the performance of the market.

The proposed market combines a recreational with a working market in order to offer a diverse mixture of products and price ranges. The recreational market will allow for a setting of both permanent and temporary stalls offering an economical place for those starting out and the more established vendors. The market is intended to provide a variety of produce, meats, and dry goods from well established local stores and vendors.

The location of goods is organized so that the meat, fish, bakery and staple goods would be located in permanent

42. The Location of Goods.



stalls against a solid back wall. Service is from one side only. Like the *bazaar*, the most precious goods (such as imported spices and teas) would be located in the center under the skylit courtyards.

The outer perimeter is composed of a relatively transparent mixture of temporary day stalls and permanent stalls for vegetables and fruit – the most colorful of the displays. Garage type doors along the market facade open the market up to the street on warm days.

A brilliant collection of flowers occupy the bay closest to the garden. It acts as a transitional element between the urban market and the garden setting. A fountain marks the center of the flower market and creates a link to the garden outside. The fountain provides a continuous flow of water for shoppers to wash fruit for an impromptu snack.

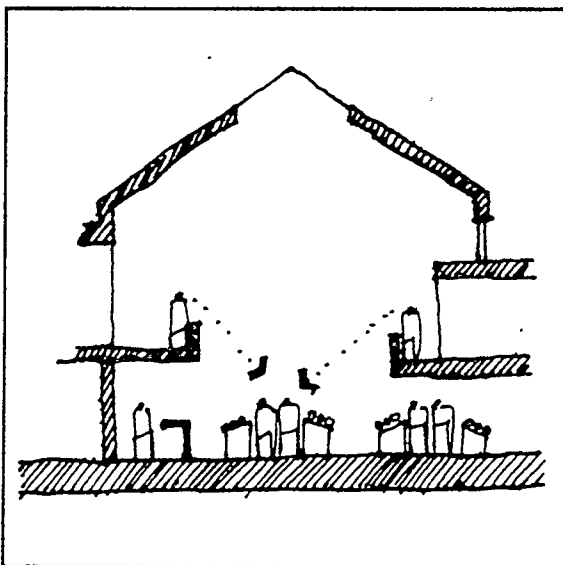
The interior of the building is naturally lit by skylights and indirect side lighting. It brings an open airy quality to the space.

The service spaces of the building are an expression of public and service rooms. The two room types are referred to as 'served' and 'servant' spaces. All washrooms, storage, mechanical and electrical requirements are placed in vertical 'servant' rooms which are also part of the structural system.

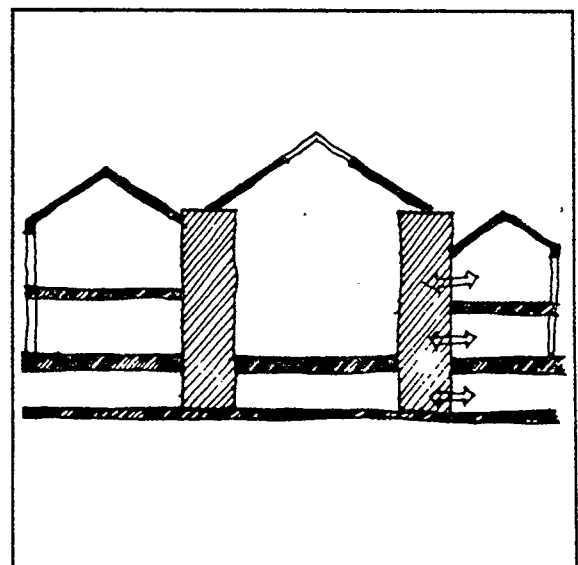
The working market offers an opportunity for reasonable rents in one of the old Bus Barns buildings. Minor renovation to the spaces, such as the addition of skylights, awnings, paint and signage, will keep the costs to a minimum.

The space allows farmers the opportunity to sell from the back of their trucks or on day tables after

43. Balcony Views.



44. Servant Spaces.



purchasing a day license. The vehicles arrive and leave at the east end of the building, similar to the way in which it currently functions. Openings on the west end are used by pedestrians to get to and from the permanent market.

Since public parking is always in demand during the week for office workers, the Bus Barn can double as public parking when seasonal or special markets are not going on. Thus the building can be utilized as a market or both week and weekend parking, like many other traditional market halls.

THE RETAIL SHOPS

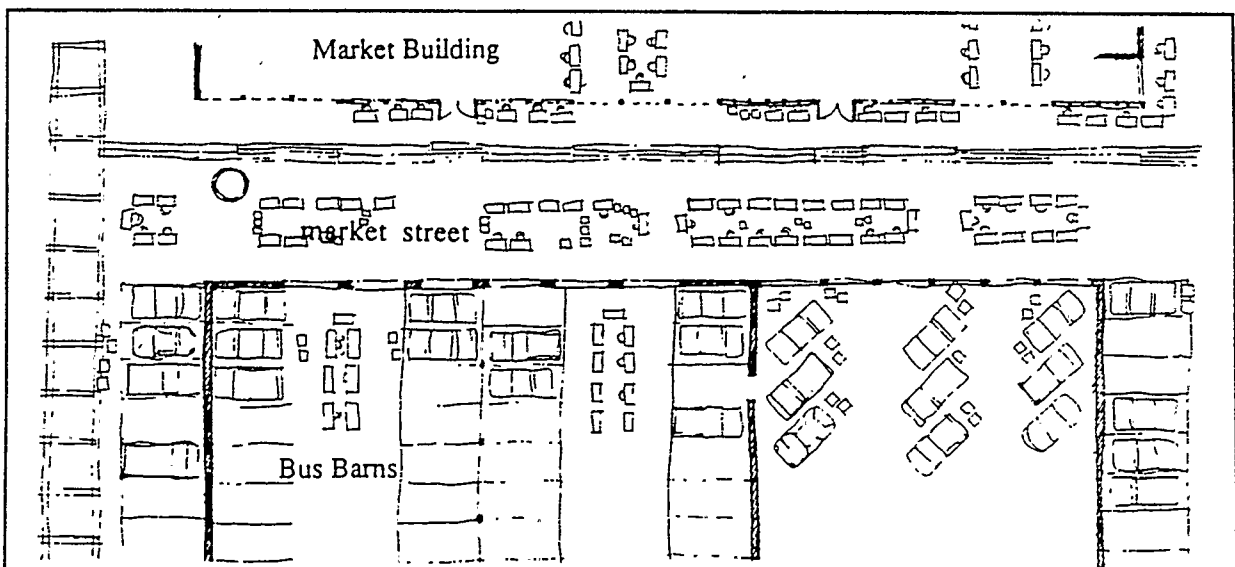
The small shops on the main level are a part of the new building but have separate entrances off the formal street. Outside the shops a colonnade space shelters pedestrians and

offers the shop owner a place for displaying his/her goods during 'sidewalk sales'. The second level shops are accessed by elevators or stairs through the market side. These shops face into the market offering views to the activities below. Bridges carry pedestrians across to the studios or offices.

The emphasis is on the individuality of each shop. The façades behind the colonnaded walk would be developed to evoke the personality of the inhabitants and their goods. The shops, like the market, will consist of local merchants who operate their own businesses. The unique collection of shops will offer personal service and high quality merchandise (handmade or personally stamped goods). Each shop ranges from fifty to one hundred square meters net rentable space.²³

The shops bring people into a fuller

45. The Working Market.



awareness of where their goods came from. The shops should offer participation with the buyer and, in a sense, bring the process into full view. This process of how pottery, baskets and children's toys are made could be an integral part of shopping.

There are breaks in the rhythm of shops along the promenade street as a clue to the informal market functions behind. At this point, market activities are allowed to spill out onto the street offering a staccato of formal shops and animated spaces.

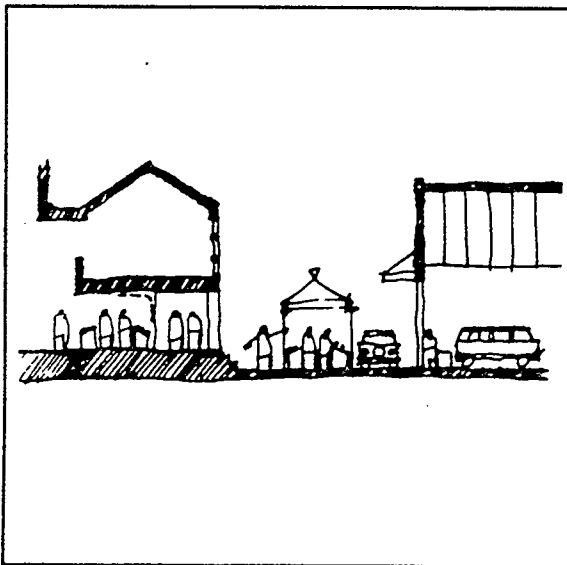
THE WINTER GARDEN

Within the building is a winter garden which is a place to sit and rest – a place of refuge from the fast pace of the surroundings and a place to savor the fresh produce bought in the market. Benches and planter edges provide public seating. Water adds to the ambience and dilutes the noises of the market.

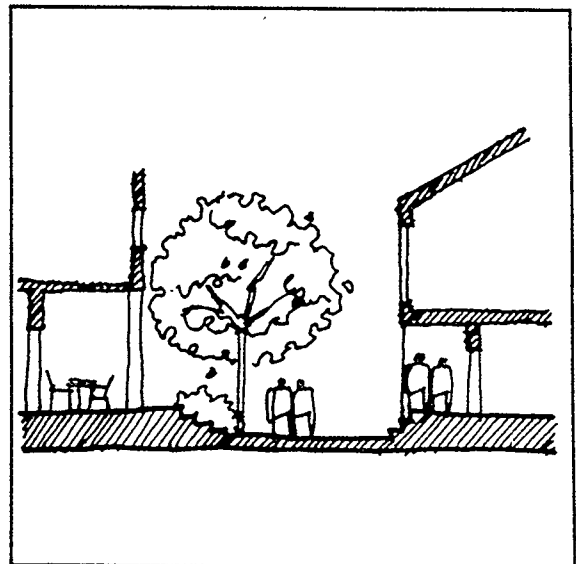
A single sculptural stair draws people up to the highest viewpoint overlooking the site and the surroundings. From there one can see both the city and the park.

The winter garden, as an object, is set apart from the rest of the market. Its material is light and airy instead of a solid mass. A glass skin covers the spaceframe structure and contrasts the brick market building. It is the jewel as a counterpoint to the rhythm of bays in the market.

46. The Market Street.



47. The Formal Street.



THE RESTAURANTS

The cafes and restaurants are detached from the market building in order to take advantage of the Bow River setting and distant views. It is an important component to generate traffic and activity during the days, evenings and weekends.

The restaurants are broken into four separate two storey buildings sitting in the garden: a tea room, a piano bar, an informal cafe and the formal restaurant and lounge. The outdoor cafes are oriented southwards to take advantage of sun exposure and shelter from cold winds and snow drifting.

GARDEN CONCEPTS

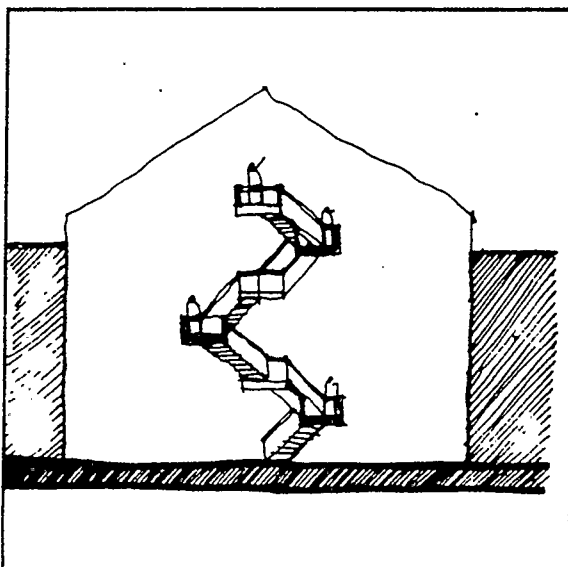
Though the garden design is not the main emphasis of the proposal, it is an important aspect because of the nature of this site. A number of garden concepts have emerged from the principles of the Italian Renaissance.

In Renaissance design, the relationship between formality and informality, artificial and natural were the main considerations of the garden.

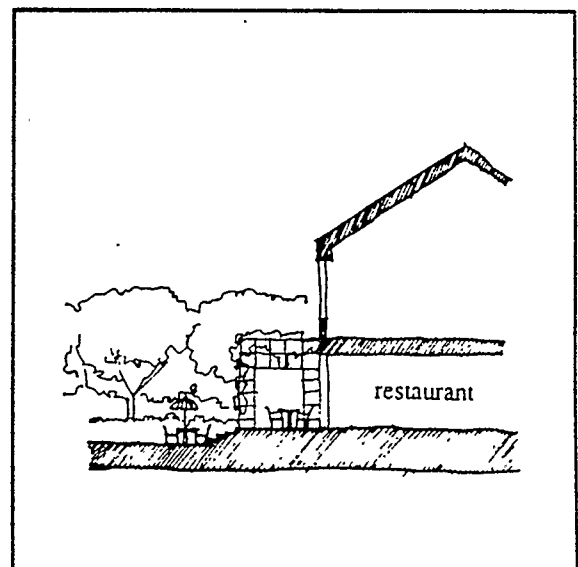
The garden spaces were developed as a series of rooms of varying shapes connected by vistas and approaches such as framed views and tree lined alleys. The garden was conceived of as a 'room of the house in the open'. Water was essential to the garden to suggest coolness both with sight and sound.

The main elements of these gardens

48. Glass Box Within Solid.



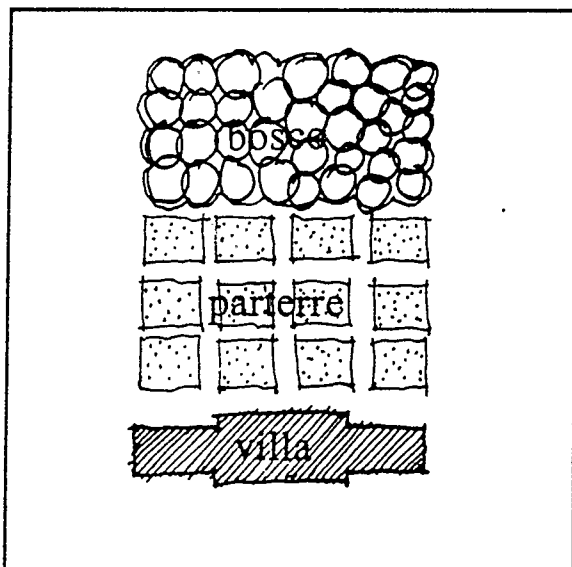
49. Sitting Spaces.



were the villa, the *parterre*, and the *bosco*. The three combined to form a closed, self supporting unit. In the center was the *parterre* – a carpet of flowers and low hedges. To the north was the *bosco* – a forest of trees. The villa was placed south of the *parterre* so that shadows could be enjoyed in its vicinity and the view into the garden would not be dazzled by the glare of the sun. The flower *parterre* became a room of the villa which did not impede the view to the *bosco*.²⁴

Villa Lante is an example of a Renaissance garden which explored these principles and is a precedent to the design. The idea of transition from the natural to the artificial, from the forest to the city is the basis of the design. It was a slim rectangular garden, decending in terraces, down a wooded slope.

50. Villa/Parterre/Bosco.



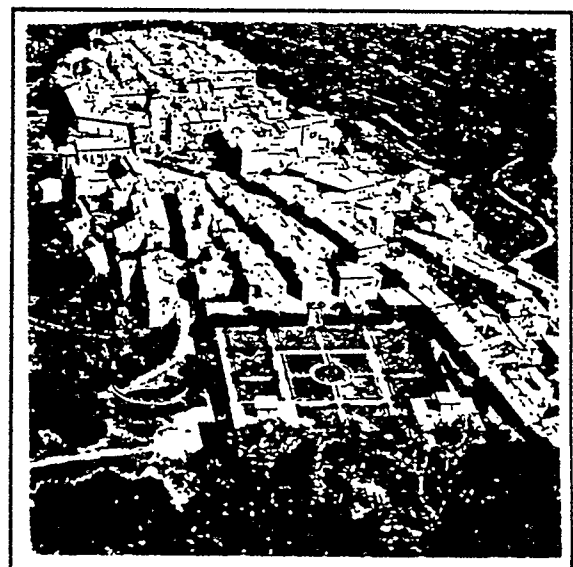
DESIGN RESPONSE: THE VILLA IN THE GARDEN

The proposed garden is a collection of outdoor rooms from the market building to the water. The overall concept is an urban/natural transition where the treed landscape becomes more and more wild as it reaches the natural.

The components of the Renaissance garden (villa, *parterre*, and *bosco*) are used to link the urban city to the park. The *parterre* becomes an outdoor room fronting on the market and the restaurant pavilions.

The unifying concept is the water which extends the axis of the market building into the natural realm. Like the streets, the water changes from point to point as it moves toward the natural. It begins in the flower market as a fountain and from there penetrating through the building into

51. Villa Lante.



the *parterre*. Through a series of pools, the water finally reaches the river. At the river, a waterfall drops to the parking level which is seen at the entry to the underground parking. At this point, the garden becomes dark and enclosed like a grotto or a secret garden of the Renaissance.

The garden completes the conception of urban to natural or formal to informal allowing contact with both nature and urbanity for those lured into participating in city life.

SECTION VII CONCLUSIONS

"A market has yet another definition: a place where people come to meet, to have a good time and to get in touch with one another. And that, in a somewhat depersonalized decade, seems a very healthy, a very human thing."

Hans Zander, 1983.



CONCLUSION

"Unlike many 60s' ideas whose romantic concepts did not survive, that of the public market has prospered in an era when shopping is a recreational pastime."²⁵

The public market has persevered as a viable means of trade in spite of standardization, sterilization and other more recent ideas about food handling and display.

The market is an activity based on traditions that have endured through the ages. A number of archetypical forms have reappeared throughout history: the basilica, the colonnade, and the street. These three forms are linear in nature, thus demonstrating that paths and movement are intrinsic to the market function.

- This project explores both the urban and architectural forms of the historic market. In an urban sense, the proposal examines the processional quality of markets through linear movement. Both indoor and outdoor rooms link together to form a dynamic path from the city to the river. Spaces – active or passive, small and enclosed, grand and bright, formal or informal – all have a place in the scheme.

In an architectural sense, the proposal combines a market, retail shops, studios and restaurants with streets and gardens. These elements integrate into the context to make architecture something of value.

By linking the buildings to the main path, the proposal has a dominant external orientation and response to the street life and natural amenities of the area. This market creates a shopping experience as a pleasant pastime and as a community focus, in harmony with public space and public life.

APPENDICES



APPENDIX A HISTORICAL ANALYSIS

APPENDIX B PROGRAM INFORMATION

A summary of figures in the existing program²⁶, used as a guideline for the proposal, is as follows:

AREA	NET FLOOR AREA (m ²)	GROSS FLOOR AREA(m ²)
Public Market	2,800	4,500
Retail Shops	4,100	7,100
Restaurants and Theatres	3,900	4,300
Offices	600	850
Winter Garden	800	2,200
TOTALS	12,200	18,950

Parking Requirements: * 225 stalls on-site
 435 stalls off-site

A summary of the actual figures based on the proposal are:

AREA	NET FLOOR AREA (m ²)	GROSS FLOOR AREAS (m ²)	NET/GROSS RATIOS**
Public Market	1,480	2,025	
Retail Shops	2,025	3,845	
Studios	1,080	1,455	
Winter Garden		380	
SUBTOTAL	4,580	6,850	67%
Restaurants	750	1,035	72%
TOTAL	5,330	7,885	
Farmers' Market	845	1,127	75%

Parking Requirements:* 97 on-site stalls
190 off-site stalls

Parking Proposed:

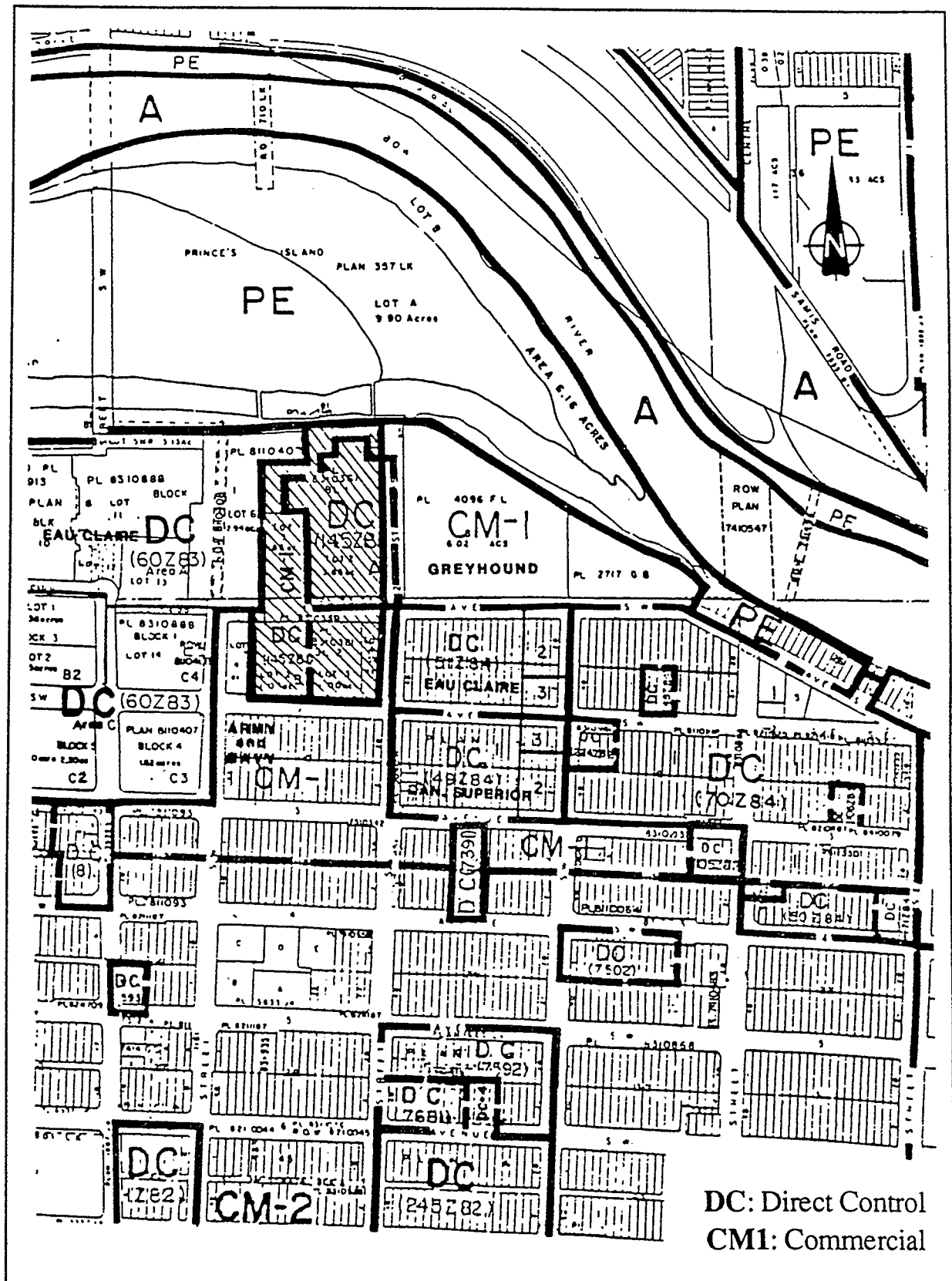
Underground	340 stalls
Surface	350 stalls

* These requirements are based on one stall per 55 m² net rentable area for on-site parking and one stall per 28 m² net rentable area for off-site parking.

**** The rule of thumb for retail space is 50% - 60% net to gross area for Festival Markets and 60% - 75% net to gross area for Shopping Centres.**

APPENDIX C

LAND USE DESIGNATIONS



APPENDIX C SITE INFORMATION

SUNLIGHT PROTECTION GUIDELINES

The sunlight protection guidelines contained in the *Core Area Policy Brief* (1982) as approved by City Council.

- On the Riverbank Promenade between Third Street West and Center Street, an area 9 meters wide throughout abutting the top of the south bank of the Bow River, as determined by the Approving Authority, from 10:00 a.m. to 4:00 p.m. Mountain Daylight Time on September 21st. must not be overshadowed by development.

For the Third Street Mall (Barclay Mall) the following areas must not be overshadowed by development:

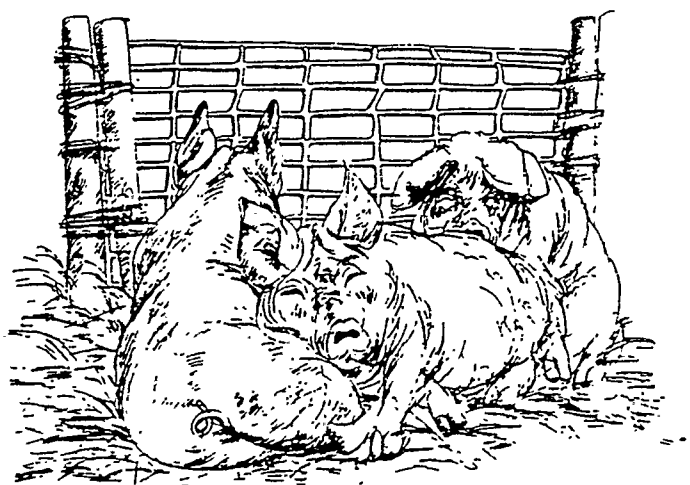
- the westerly 8 meters of the right of way and set back area from 12:30 p.m. to 1:30 p.m. Mountain Daylight Time on September 21st.
- the easterly 8 meters of the right of way and set back area from 12:30 p.m. to 1:30 p.m. Mountain Daylight Time on September 21st.

FLOODPLAIN RESTRICTIONS

The following conditions apply to all developments on the floodplain:²⁷

- the first floor of the building shall be constructed at, or above grade, the designated floor level;
- all principal electrical, heating or mechanical equipment shall be at, or above grade, the designated floor level;
- the ground level of the site is to be raised to or above the designated floor level.

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ILLUSTRATION CREDITS

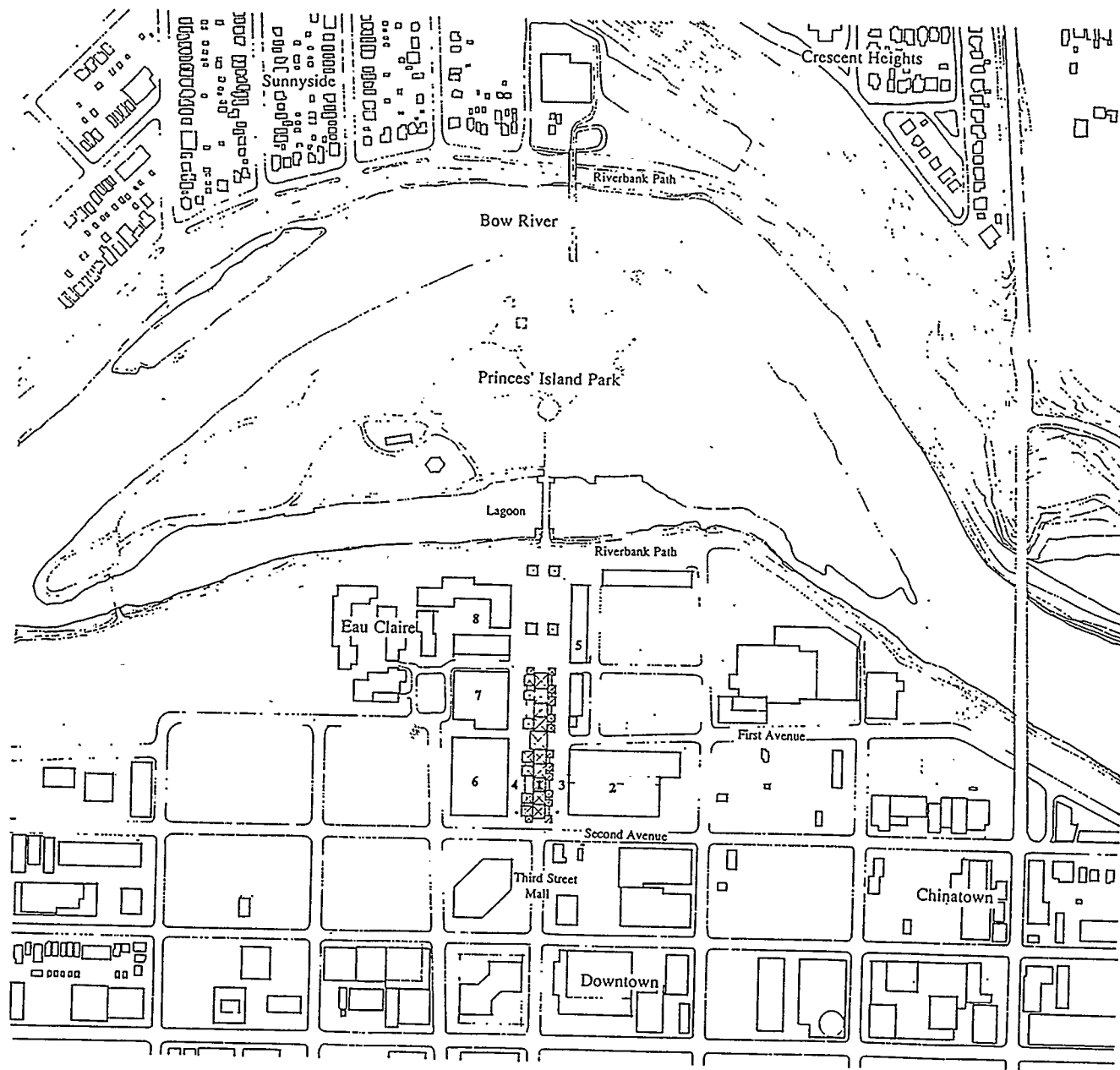
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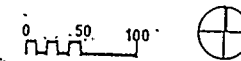
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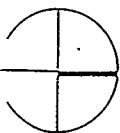
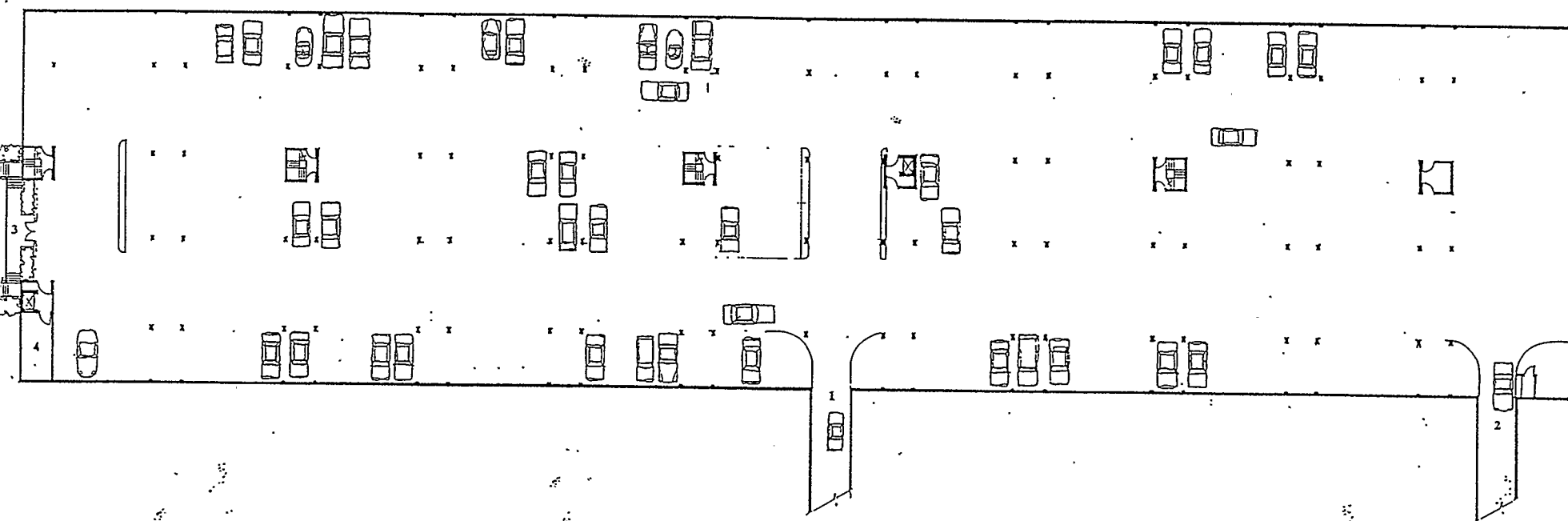
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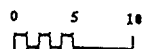
1. eau claire market
2. farmers' market
3. market street
4. formal promenade
5. proposed housing
6. future hotel
7. ymca
8. future eau claire housing

SITE PLAN



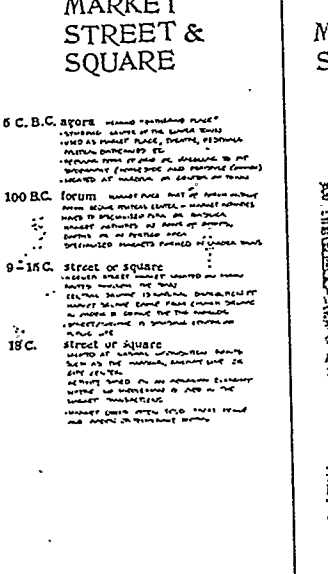
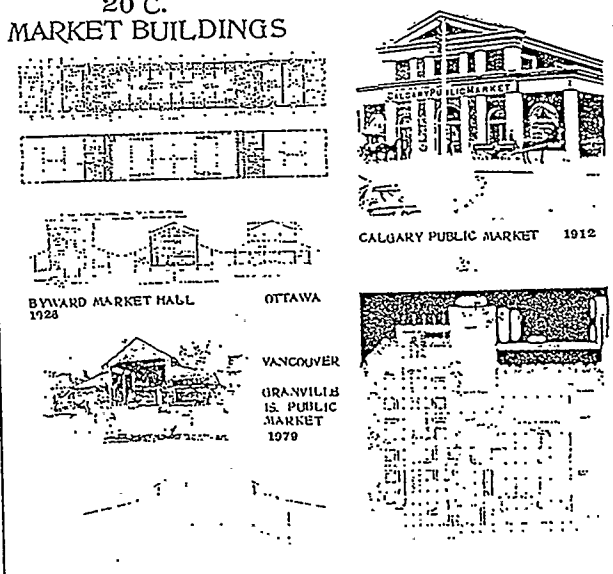
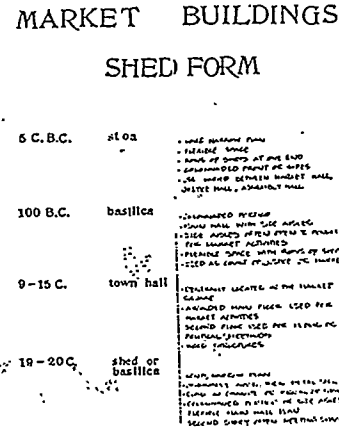
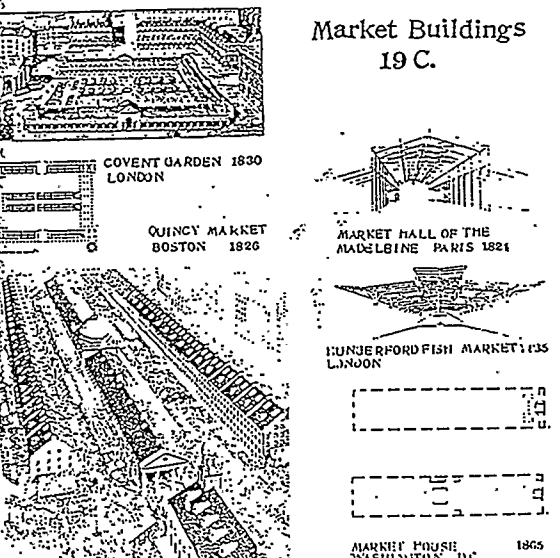
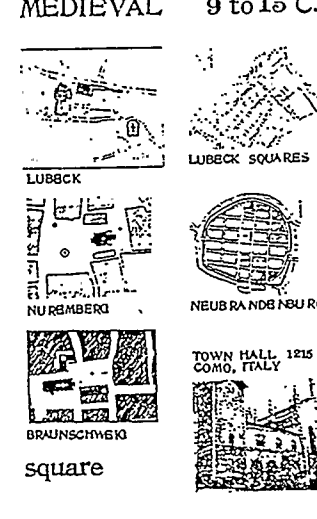
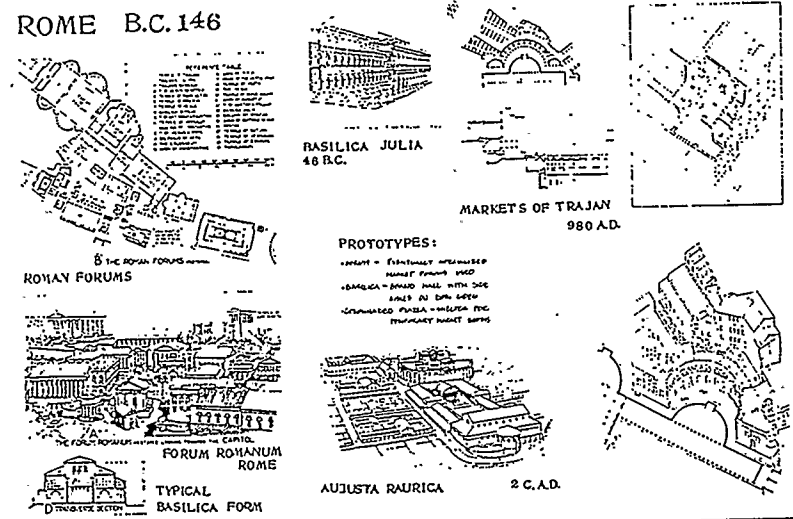
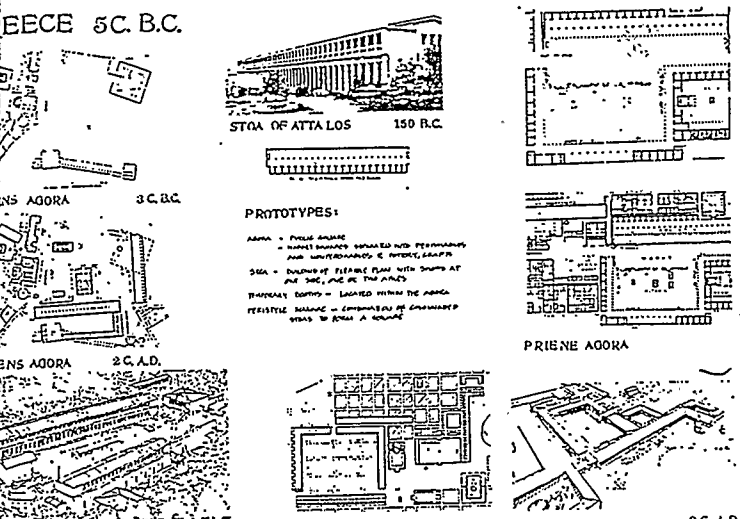


**PARKING
LEVEL**



1. automobile entrance
2. automobile exit
3. pedestrian access
4. mechanical

SHEP, STREET,



OF MARKETS: SHED, STREET, & SQUARE

B.C. 146

BASILICA JULIA
46 B.C.

MARKETS OF TRAJAN
980 A.D.

PROTOTYPES:

- FORUM - EVENTUALLY RECALLED MARKET FORMING WED
- BACILICA - GRAND HALL WITH SIDE ARMS, ON BOTH SIDES
- COLONNATED PLAZA - SHELTER FOR TEMPORARY MARKET BOOTH

FORUM ROMANUM
ROME

TYPICAL
BASILICA FORM

AJUSTA RAURICA

2 C.A.D.

20 C. MARKET BUILDINGS

BYWARD MARKET HALL
1728

OTTAWA

VANCOUVER

GRANVILLE
IS. PUBLIC
MARKET
1970

CALGARY PUBLIC MARKET 1912

MARKET
STREET &
SQUARE

5 C.B.C. agora - MEANS "GATHERING PLACE"
 • SYMBOLIC CENTER OF THE LOWER TOWN
 • USED AS MARKET PLACE, THEATRE, FESTIVAL
 POLITICAL GATHERINGS ETC.
 • FEELING OF A GED IN RELATION TO THE
 "GEOGRAPHY" (HOUSEHOLD AND POSITIVE COMMON)
 • LOCATED AT HARBOUR OR CENTER OF TOWN

100 B.C. forum MARKET PLACE PART OF FORUM W/OUT
FORUM OCCUPY POLITICAL CENTER - MARKET ACTIVITIES
MOVED TO SPECIALIZED FORA OR BAILEA
MARKET ACTIVITIES IN RONS OF STOPS,
COFFINS OR IN PERITIO ARCA
SPECIALIZED MARKETETS FORMED IN UNDER TUNES

9-15C. street or square

- ADJACENT STREET MARKET LOCATED ON MAIN
- ROUTES THROUGH THE TOWN
- CENTRAL SQUARE IS NATURAL DIRECTION P
- MARKET SQUARE BECAME FROM CROWN SQUARE
- IN ORDER TO FORMING THE TWO MARKETS
- STREET/SQUARE IS DRIVING CENTER OF
- PUBLIC LIFE

18C. Street or Square
 • LOCATED AT NATURAL COMMUNICATION POINTS
 SUCH AS THE MARKET, EXISTING LINE OR
 CITY CENTER
 • ACTIVITY BASED ON AN AROMATIC RECENTLY
 THERE NO MIDDLEMAN OR MED IN THE
 MARKET TRANSACTIONS
 • MARKET OCCURS OPEN SP. ENCL. FORME
 AND WORKS ON PERMANENT BASIS

MARKET SQUARE

18 C.

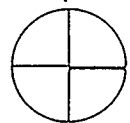
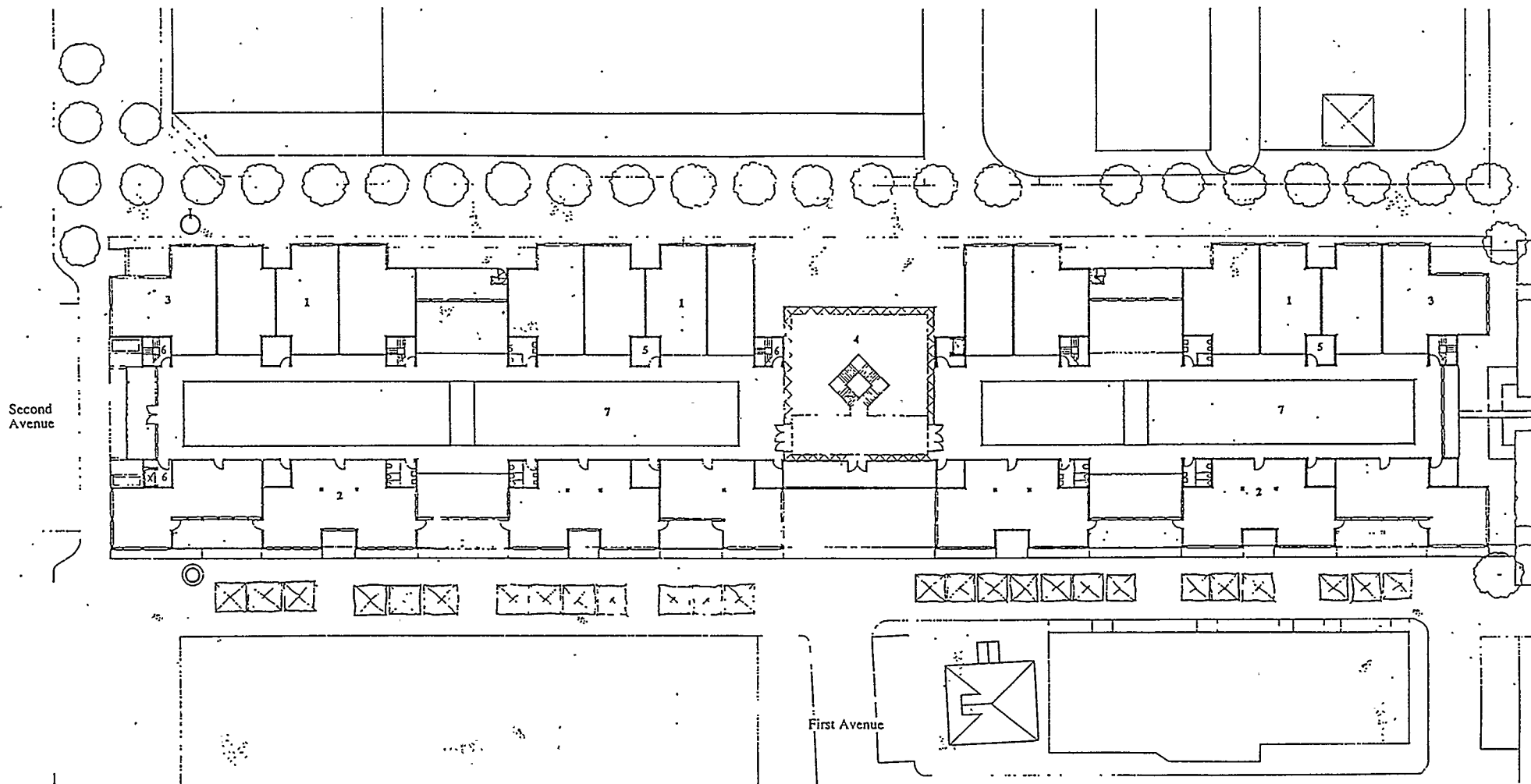
MONTREAL

1760

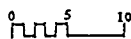
MARKET SQUARE PROVIDENCE, R.I.
1844

CAMBRIDGE 1837
MASS.

1637

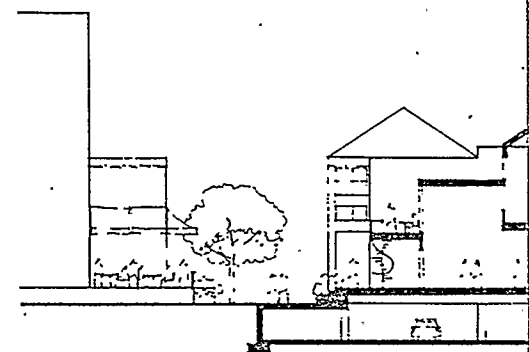


SECOND LEVEL

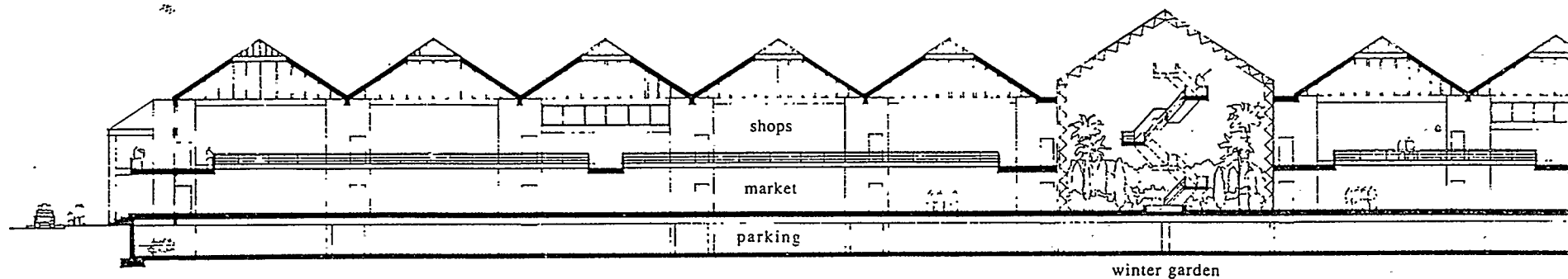




SOUTH ELEVATION

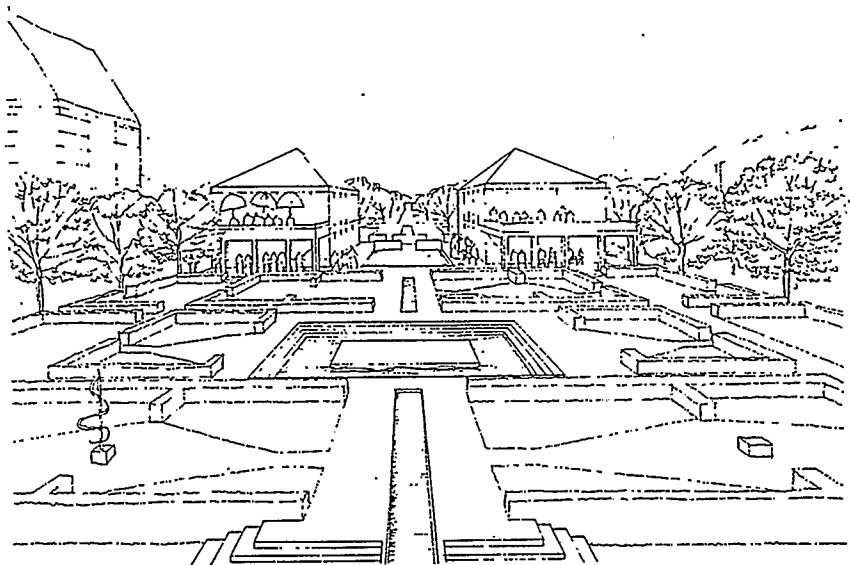


EAST-WEST SECTION
THROUGH MARKET

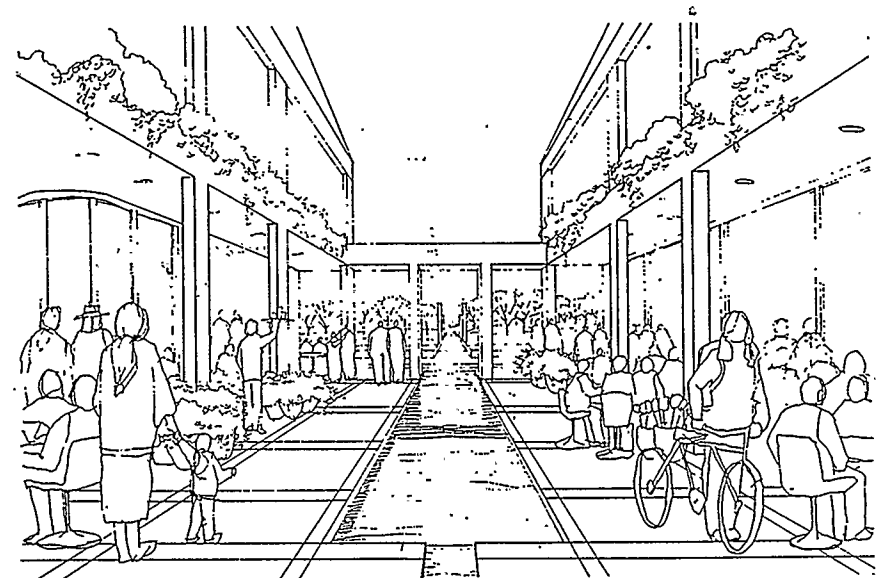


NORTH-SOUTH SECTION

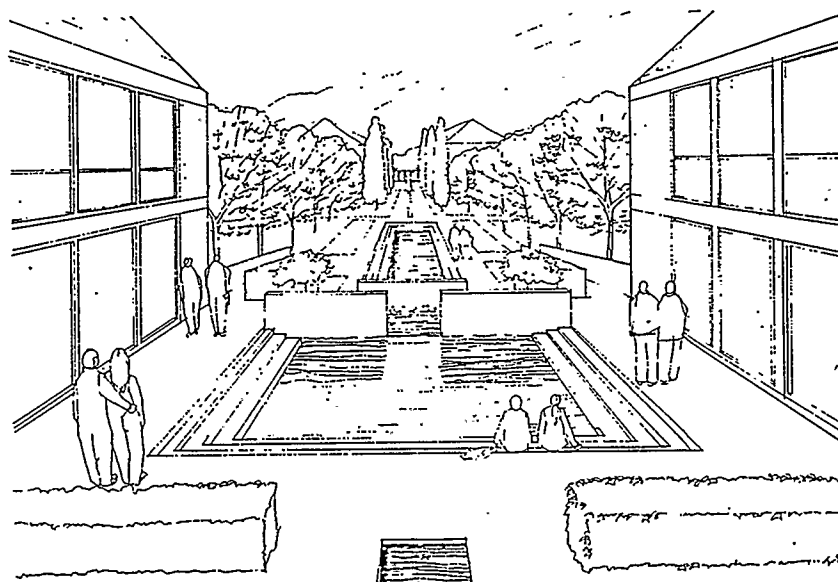




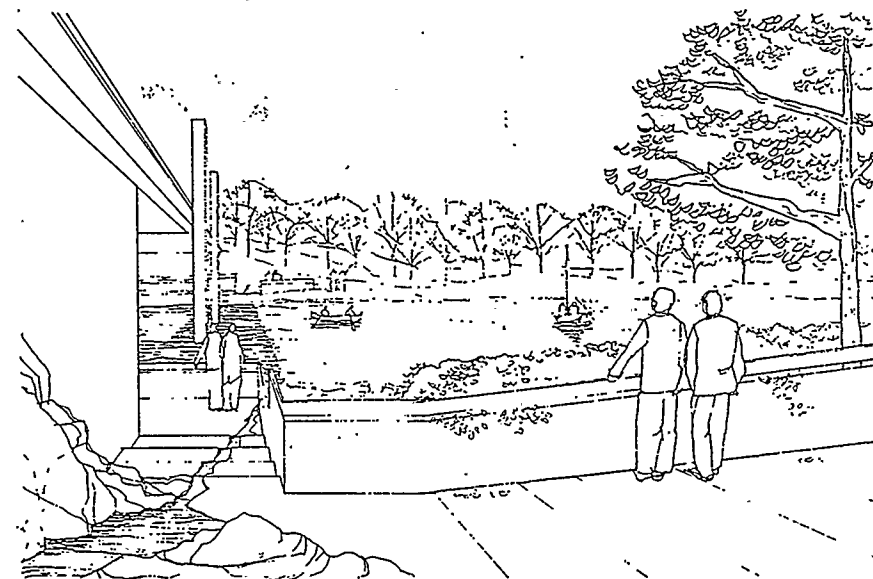
PARTERRE



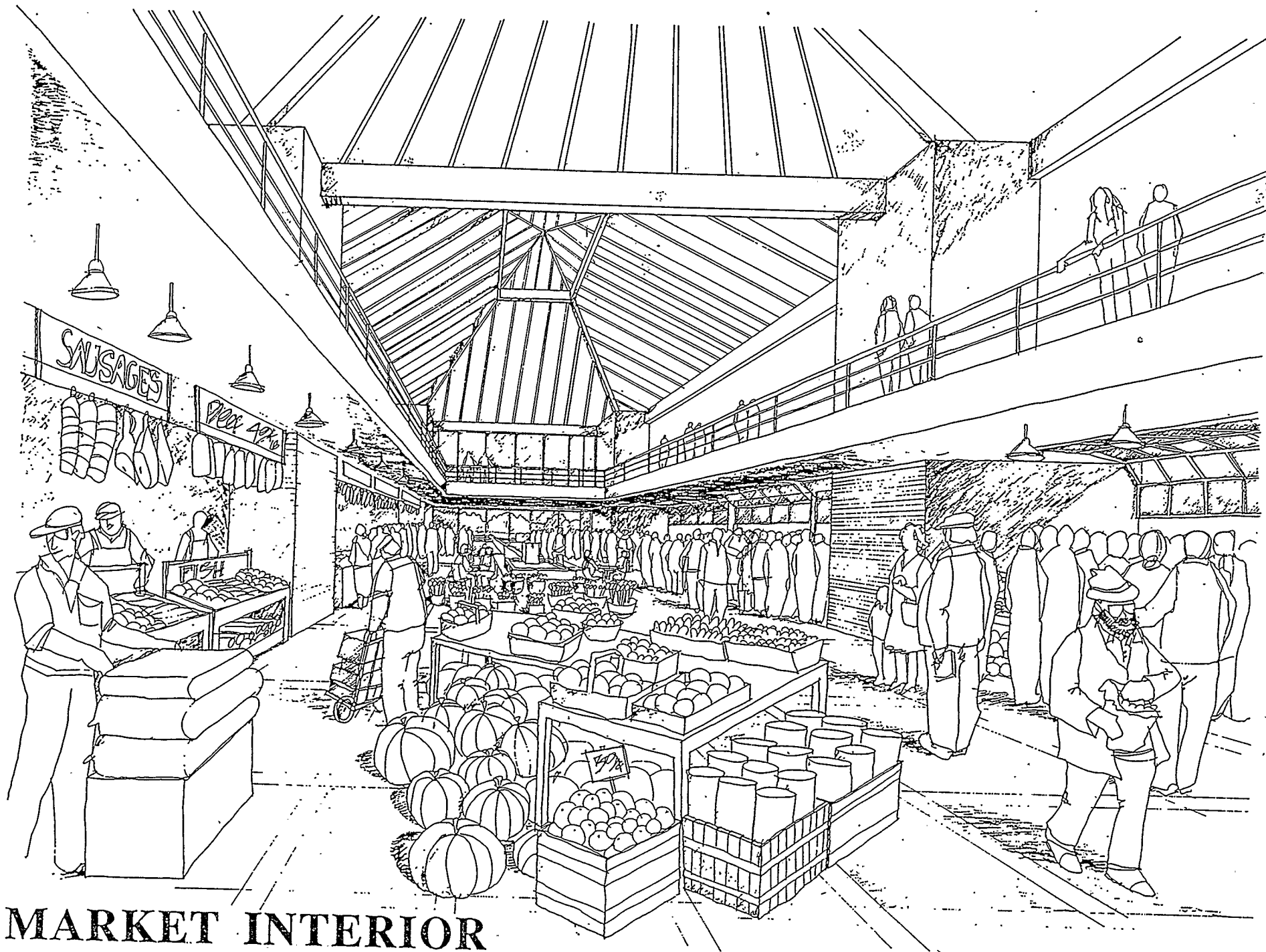
RESTAURANT COURT



WATER COURT

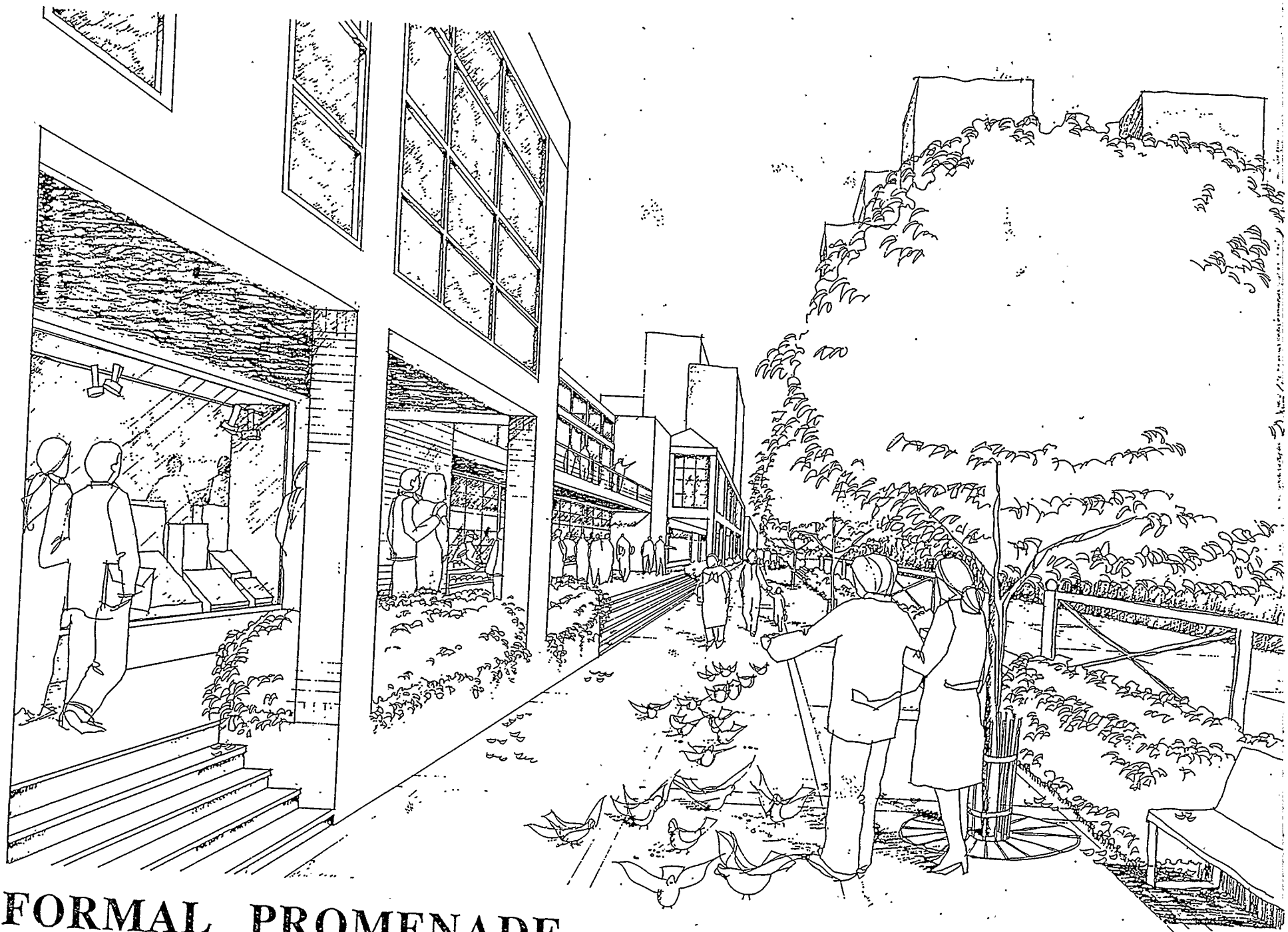


RIVER TERRACE



MARKET INTERIOR





FORMAL PROMENADE